

City of Fredericksburg Comprehensive Plan

Adopted by the Fredericksburg City Council

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Part I:

A Livable City

Defining the City's Future

In 2007, the City Council adopted a Vision Statement to guide Fredericksburg toward its 300th anniversary in 2028. This Comprehensive Plan provides the framework for the community to attain that vision – addressing current conditions, defining goals for the future, and providing strategies that reconcile existing conditions and the City's desired outcomes. This Part I of the Comprehensive Plan sets the stage with a clear statement of vision, a brief overview of what a comprehensive plan is supposed to be, and a presentation of facts about the community.

- Preface
- Chapter 1: City Council Vision and Comprehensive Plan Overview
- Chapter 2: Fredericksburg Today: A Community Profile

Preface

Fredericksburg, Virginia, May 2015

This Comprehensive Plan has been adopted by the Fredericksburg City Council to guide decision making for the physical development of the community. It is used to help the City move forward in a manner that embraces local values and achieves the community's vision for itself.

City Council adopted its last comprehensive plan in 2007. A year later, the nation experienced a severe economic downturn that significantly reduced the available revenues that are needed to cover local government costs. The local real estate market dropped, although not as much as it did in some parts of the country because of the City's favorable location along the Interstate-95 corridor and its proximity to the Northern Virginia/Washington D.C. metropolitan area. Still, some area housing lost value and many local businesses are still recovering. In 2015, the City is seeing renewed investment in the community and this Plan renews the City's policies to guide the anticipated growth.

This Comprehensive Plan is organized as follows:

- Part I: The City's vision, plan overview, and community profile
- Part II: Promoting and Sustaining a Livable Community
- Part III: Land use plan and ten sub-planning areas
- Part IV: Appendices

Chapter 1:

City Council Vision and Comprehensive Plan Overview

Introduction

The concept of the public welfare is broad and inclusive. The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community shall be beautiful as well as healthy, spacious as well as clean, well-balanced as well as carefully patrolled.

Supreme Court Justice William O. Douglas

The ability of the City of Fredericksburg to direct its own future lies principally in its authority to regulate land use and in the wisdom of the City Council's decisions when investing in public improvements. A Comprehensive Plan provides the agreed upon policies that can guide the City toward its stated objectives. Planning is ongoing, however, in a dynamic process that includes professional analysis and citizen participation.

When people define the qualities that make Fredericksburg an attractive place to live and do business, they often resort to phrases like *quality of life, small town atmosphere, and sense of place*. These words express the values of the community, but if they are to remain a reality, they must be sustained and enhanced through specific City actions. Historically, places with a good quality of life provide maximum opportunity for social encounter and exchange in public places, as citizens attend to their daily activities. Attention to the community's physical, social, and economic attributes is the key to maintaining an authentic sense of place.

Vision Statement

In 2007, the Fredericksburg City Council adopted the following Vision Statement that sets out the community's fundamental values as it approaches the 300 year anniversary of its existence:

Since the City's founding in 1728, the citizens of Fredericksburg have overcome many challenges, created the character of the City, and ensured its extraordinary role in our Nation's history. During our stewardship of this great City, we resolve to build on this heritage and add our mark on the City's history.

The City Council's vision for Fredericksburg at its 300th Anniversary is:

- *To be a city animated by a sense of its unmatched, irreplaceable history;*
- *To be a city characterized by the beauty of its riverfront, the vibrancy of its downtown, and its safe and attractive neighborhoods;*
- *To be a city inspired by active arts, cultural, and education communities;*
- *To be a city shaped by civic involvement and economic vitality; and*
- *To be the city of choice for people of many income levels, cultures, ethnicities, and physical abilities to live, work, and play.*

The Comprehensive Plan

Authority

The Commonwealth of Virginia requires a local governing body to adopt a comprehensive land use plan, prepared by the local planning commission, for the physical development of the jurisdiction. The specified process is to study existing conditions, growth trends, and probable future requirements and then develop a plan for "the purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory, which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, including the elderly and persons with disabilities (Code of Virginia Section 15.2-2223.A)."

The comprehensive land use plan is to be general in nature, designating the general or approximate location, character, and extent of transportation improvements, new or improved facilities, and development areas. When evaluating growth trends, localities must use the official estimates of the Weldon Cooper Center for Public Service (of the University of Virginia), the Virginia Employment Commission, the United States Census Bureau, or other official

government projections required for federal transportation planning (Code of Virginia Section 15.2-2223.1).

Previous Planning

The City's first comprehensive plan was adopted in 1970. It contained a thorough analysis of Fredericksburg's population, economy, transportation network, housing supply, and public services and facilities and then presented a recommended land use plan. This overall plan was not updated again until 1981, but included a large public participation component when that process finally occurred. The annexation of 4.4 square miles of land from Spotsylvania County in 1984 required that a plan be developed for this new city area, which was completed in 1987. Subsequent plans, completed in 1993, 1999, and 2007, have included significant public input and this emphasis on citizen participation continues.

A great many plans have informed this current comprehensive plan and these documents are listed below, under **Additional Current Planning**.

Plan Implementation

A comprehensive plan is not a regulatory instrument in its own right. Instead, it is an advisory document that guides the formulation of the local zoning ordinance. It also includes standards against which requests for zoning map amendments and special use permits can be measured. Under circumstances not anticipated by the adopted plan, the governing body also has the discretion to look beyond its adopted standards and follow another reasonable approach in order to reach a sound land use decision.

The Unified Development Ordinance (UDO) contains the zoning regulations that are the principle vehicle for implementing the comprehensive plan. This local ordinance addresses the use, density, location, division, and construction upon virtually all properties within the City, with the exception of State and Federal lands. The objectives of the Virginia Chesapeake Bay Act and other environmental regulations are also translated into this local ordinance, for their local application.

Public Facilities Review

In addition to providing the basis of the City's zoning regulations, the comprehensive plan includes recommendations for public facilities, noting their approximate location, character, and extent. The plan also indicates whether public facilities are to be newly constructed, expanded, relocated, abandoned, or changed in their use. When public action is planned for a public facility, the Planning Commission must certify that the proposed public action is in

substantial compliance with the adopted plan. If a proposed action is found not to comply with the adopted plan, the public project must be modified so that it complies with the plan or the plan must be amended, with appropriate public participation, to accommodate the facility (Code of Virginia, Section 15.2-2232). This State Code section also notes that the governing body may overrule the Planning Commission's determination.

Capital Improvements Program

Capital improvements are the construction or expansion of public facilities to add capacity for the levels of service provided to the community. A Capital Improvements Plan (CIP) is the principle guide for carrying out the recommendations of the adopted comprehensive plan. Developing a CIP allows the City to anticipate revenues and capital expenditures, so it can prioritize capital projects and ensure that finite financial resources are used effectively. The CIP is updated annually, in conjunction with the City budget, and is reviewed by the Planning Commission (Code of Virginia, Section 15.2-2239).

Transportation Plan

The comprehensive plan must include a transportation plan that has been reviewed by the Virginia Department of Transportation. This element of the comprehensive plan shows the City's infrastructure needs as well as all proposed road projects and road improvements, with maps and cost estimates. Further, the transportation plan must include alternative modal facilities such as rail and bus stations, bicycle and pedestrian accommodations, bridges, and so on. The hierarchy of roads (highways, arterials, collectors, etc.) must also be made clear (Code of Virginia, Section 15.2-2222.1).

Urban Development Areas

Land use is driven by available infrastructure and the Commonwealth of Virginia allows localities to designate strategic growth areas where existing and planned development is in close proximity to transportation facilities and where utilities (such as water and sewer) are readily available (Code of Virginia, Section 15.2-2223.1). The intent is to ensure the best use of finite space to support the creation and maintenance of attractive, livable urban communities, which are called urban development areas (UDAs).

The Code of Virginia identifies levels of development considered appropriate in a UDA and these standards are well established in Fredericksburg. As a consequence, the entire City is considered a UDA. Related policies that maintain and enhance Fredericksburg as a strategic growth area are contained throughout this comprehensive plan.

Coastal Resource Management Guidance

Within Virginia's Tidewater region, which includes the City of Fredericksburg, jurisdictional comprehensive plans must include guidance related to coastal resource management (Code of Virginia, Section 15.2-2223.2). The ecosystems that exist between land and water are very complex and function to keep shorelines stable, to provide aquatic and terrestrial habitat, and to maintain and improve water quality. The Commonwealth of Virginia is concerned that inappropriate development of these sensitive areas threatens their long-term sustainability. As a consequence, the Virginia Institute of Marine Sciences has prepared Comprehensive Coastal Resource Management Guidance for best practices in these sometimes fragile ecosystems. This document is listed under other plans and incorporated herein by reference.

Housing Plan

The comprehensive plan must also include the designation of areas and implementation measures for the construction, rehabilitation and maintenance of affordable housing. Such affordable housing is to be sufficient to meet the current and future needs of residents at all income levels within the community, while considering the current and future needs of the Planning District as well (Code of Virginia, Section 15.2-2223.D). The City develops a Consolidated Plan for Community Development Programs, which includes an affordable housing analysis and implementation plan. This comprehensive plan reflects that extensive study.

Proffers/Pro Rata Funding

The Code of Virginia allows localities to accept voluntary proffers from property owners seeking to change the zoning designation of their land. Such proffers are a means to help fund community facilities and infrastructure that will be required as a result of the proposed development. In addition, the State Code allows the City to seek pro-rata funding and availability fees from developers, to help pay for extending and expanding public facilities needed to serve the new development (Code of Virginia, Section 15.2-2243).

Once accepted, proffers are legally binding agreements that remain with the zoning of the property. Proffers may include use restrictions, design standards beyond what is required by the local code, enhanced landscaping, amenities, dedication of land to the locality, construction of public infrastructure, and even monetary contributions that mitigate the cost of additional public facilities capacity. Any land dedicated must be suitable for the specified use. Proffered infrastructure must also meet adopted development standards. Monetary contributions must be based on the locality's current CIP, to ensure they properly reflect the impact of the

proposed land use on capital facilities. Monetary proffers cannot be made to cover general renovations, technology upgrades, general operating expenses, or routine maintenance.

Regional Cooperation

The City of Fredericksburg and adjacent counties have addressed many issues on a regional basis. Ongoing collaboration is found in the areas of transportation, stormwater management, water supply planning and distribution, wastewater treatment, solid waste disposal, public safety, and other important community needs. The State Code allows localities to enter into cooperative agreements with one another and any rights provided under such agreements may be modified or waived by the governing bodies, provided that the modifications or waivers do not conflict with the Constitution of Virginia. The range of potential agreements may include arrangements for fiscal matters, land use, zoning, subdivisions, infrastructure (as already noted above), revenue, and sharing economic growth (Code of Virginia, Section 15.2-3400).

Additional Current Planning

Many previously adopted planning documents were used to develop this comprehensive plan, including the following:

- City of Fredericksburg Affordable Housing Policy (September 1989)
- City of Fredericksburg Comprehensive Parking Study (January 2006)
- Climate, Environment & Readiness (CLEAR) Plan for Virginia's George Washington Region (April 2014)
- Comprehensive Coastal Resource Management Guidance (January 2013)
- Comprehensive Sewerage Facilities Plan (February 1989)
- Comprehensive Water Facilities Plan (February 1989)
- Consolidated Plan for Community Development Programs (May 2010)
- Fredericksburg Area Metropolitan Planning Area 2040 Long Range Transportation Plan (April, 2013)
- Fredericksburg City Public Schools Capital Improvement Plan, 2013-2017
- Fredericksburg City Public Schools Comprehensive Plan, 2012-2017

- Fredericksburg Economic Development Authority Strategic Plan, October 2010-September 2015
- Fredericksburg Pathways: A Bicycle and Pedestrian Master Plan (January 2006)
- Fredericksburg Station Community Plan (July 1995)
- Fredericksburg, Virginia Walkability Survey (2012-2013)
- Fredericksburg Watershed Property Management Plan (January 2011)
- Historic Preservation Plan (2010)
- JumpStart! Fredericksburg (2010)
- Regional Green Infrastructure Plan (2011)
- Regional Water Supply Plan (2011)

Plan Framework

This comprehensive plan lays out a specific framework for reaching the following goals that envision Fredericksburg's future. They will be made operational by an accompanying set of policies and initiatives in each chapter. The City also intends to pursue additional planning for the ten sub-planning areas identified in this comprehensive plan.

Transportation Goals

Goal 1: Surface Transportation

Develop the City's surface transportation system to be safe, functional, and attractive, serving multiple modes of travel and making the community accessible to all citizens.

Goal 2: Alternative Modes of Travel

Encourage the use of alternative modes of travel (transit, rail, and trails), to enhance mobility and accessibility and to minimize automobile congestion.

Goal 3: Reduce Congestion

Reduce the auto-centric character of the City and resulting congestion by encouraging the use of alternative modes of travel, to enhance mobility and accessibility. Enhanced and expanded rail services are especially encouraged.

Goal 4: Walkability

Continue to expand the conditions that make Fredericksburg a pedestrian-friendly city, acknowledging that sidewalks and trails are critical infrastructure and not merely amenities. Neighborhoods should be interconnected and outlying areas connected to the city center through safe pedestrian/bicycle pathway networks.

Goal 5: Complete Streets

Ensure the City's transportation system accommodates the safety and convenience of all users including pedestrians, bicyclists, mass transit riders, persons with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users.

Goal 6: Transportation Efficiency

Reduce congestion on existing streets. Minimize potential street congestion resulting from new development. Work with surrounding jurisdictions and the Commonwealth of Virginia to improve regional transportation safety and efficiency.

Goal 7: Transportation Safety

Recognize that the needs of various modes of travel must be coordinated with each other, such that arterial roads provide for the free flow of vehicular traffic while neighborhood streets and the downtown grid maximize pedestrian safety.

Goal 8: Urban Development Areas

Recognize that the entire City of Fredericksburg is a strategic growth area within the region and continue to ensure that land use decisions recognize that compact, integrated development is the best use of finite urban space.

Goals for Public Services, Public Facilities and Preserved Open Space

Goal 1: Efficient and Effective Public Services

Provide the City's public services in an efficient and effective manner to all City residents.

Goal 2: Safe and Secure Environment

Provide a safe and secure environment for those who live, work, and visit the City, through high-quality public safety facilities and systems.

Goal 3: Education Facilities

Provide high quality education facilities.

Goal 4: Educational System

Provide a quality education that assures opportunity for all students, so that they are encouraged to meet high academic standards and empowered to become productive citizens.

Goal 5: Parks and Open Space

Ensure the City's parks, open space, and recreational programming meets the needs of the full community, including families, youth, seniors, and citizens with special needs, through recreational opportunities, both passive and active, in public parks and on City owned lands.

Goal 6: Clean and Safe Water Supply

Ensure the Rappahannock River continues to function as a clean and safe supply of water for the City and the region. Maintain the natural integrity of the river and its tributaries, for their biological functions that protect the City's raw water supply.

Goal 7: Riverfront

Connect the community to the Rappahannock River, both visually and physically, with parks that provide focal points, have recreational benefits, respect local history, and promote economic vitality.

Environmental protection goals

Goal 1: Resource Protection

Ensure that growth and development does not compromise the function of natural ecosystems, by establishing and updating land use policies that identify and manage the cumulative impacts of individual development projects.

Goal 2: Watersheds

Protect the ecological integrity of the Rappahannock River watershed from inappropriate development, in order to ensure the highest water quality and to preserve natural resources for the benefit of present and future generations.

Goal 3: Natural Functions of Rivers and Streams

Maintain the ecological integrity of the Rappahannock River and its tributaries for their biological functions and wildlife habitat, as well as for drainage, recreational uses, and other purposes.

Goal 4: Water Quality

Improve water quality through implementation of best management practices for stormwater management, erosion and sediment control, and wastewater treatment that meet or exceed the Commonwealth of Virginia's regulatory requirements.

Goal 5: Sustainability

Strengthen existing policies and develop new ones to actively promote a sustainable future.

Goal 6: Livability

Strengthen existing policies and develop new ones to actively promote a sustainable future by promoting clustered and compact development, which would be balanced by additional open space, and redevelopment of land repurposing of structures.

Goal 7: Sustainability Leadership

Expand the role of the City's Clean and Green Commission to develop sustainability/livability policy recommendations.

Goal 8: City Leadership

The City should set the example in creating a more sustainable society.

Business Opportunity Goals

Goal 1: Downtown as a Center for Commerce, Culture, and Community

Ensure that downtown Fredericksburg continues to serve as a center of commerce, art, culture, recreation, historic amenities, and government, in order to provide economic stability and a sense of community. Actively pursue the preservation and adaptive reuse of downtown buildings and ensure that infill projects are designed with sensitivity to the City's historic character.

Goal 2: A Well-Balanced Mix of Uses Downtown

Achieve a sustainable mix of commercial and residential development downtown that fits the historic character of the urban core and helps people to live, shop, and work in the city center.

Goal 3: Business Development

Ensure the City can accommodate and capture its projected share of regional economic growth, by actively recruiting desired new businesses and providing for retail and office space development in areas identified for growth.

Goal 4: Community Character

Preserve and enhance the City's visual appeal by pursuing patterns of development that respect the City's historic growth pattern (mixed-use development) and by installing landscaping and street trees (complete streets).

Goal 5: Mixed-Uses in Corridors

Achieve mixed-use development patterns as redevelopment occurs within designated corridors, by blending commercial and residential uses, as appropriate to specific locations.

Goal 6: Complementary and Connected Business Districts

Ensure that new suburban business districts complement and connect to the City's downtown and its business corridors, through multi-modal transportation and a commercial mix that offers a wide variety of goods, services, and jobs. Strive to create pedestrian connections between all business districts, as feasible and appropriate.

Goal 8: A Live Here/Work Here Community

Enhance business development opportunities through provision of an educated and skilled work force, incubation of local businesses, and active recruitment of desired outside businesses.

Goals for Residential Neighborhoods

Goal 1: Neighborhood Character

Preserve the character of the City's neighborhoods, by respecting and maintaining their functional design (sidewalks, alleys, street trees, etc.).

Goal 2: Neighborhood Quality

Enhance the quality of the City's residential areas, to promote livability and a sense of community. Livability is defined as safe and walkable, with a variety of housing choices and ready access (walking, biking, transit, automobile) to work, shopping, and services.

Goal 3: Distinct and Attractive Neighborhoods

Ensure the residential areas of the City continue to comprise a collection of distinct and attractive neighborhoods, each possessing a sense of place, history, and shared identity.

Goal 4: Adequate Public Services and Facilities

Ensure that residential neighborhoods are adequately served with efficient and multi-modal transportation, available parking, street trees, and public services such as trash pickup, leaf removal, and snow plowing.

Goal 5: Enhanced Connections

Support inclusive neighborhoods for the elderly and persons with disabilities, through multi-modal transportation that enhances connections between affordable and accessible housing, places of employment, other neighborhoods, and services.

Goal 6: Compatible Design and Functionality

Ensure that development and redevelopment is visually compatible with the overall character of the City as well as functional for all citizens, with visitability standards that ensure a basic level of access to all new housing, such as no-step entryways, wide hallways, and other features that allow homes to be adapted to persons with disabilities.

Goal 7: Affordable Housing

All persons who live and work in Fredericksburg should have the opportunity to rent or purchase safe, decent, and accessible housing within their means.

Goal 8: Variety of Housing

Provide a variety of housing opportunities throughout the City that respect the character of the community.

Goal 9: Homeownership

Encourage homeownership opportunities and seek to achieve a homeownership rate within the City of at least 40 percent.

Goal 10: Housing Maintenance and Upkeep

Maintain and protect the City's housing stock, through proper enforcement of state and local codes, to ensure an adequate supply of housing that is safe and healthy.

Historic Preservation Goals

Goal 1: City Character

Protect and enhance the character of Fredericksburg's historic area and city center as a means to preserve the community's sense of place, to promote economic strength, and to ensure the City's continued appeal to residents, businesses, and visitors.

Goal 2: Redevelopment

Promote redevelopment of downtown properties in a manner that reflects the character of the City as a vibrant and growing community.

Goal 3: Heritage Resources

Continue to recognize, protect, and interpret significant architectural, historical, and archaeological resources that constitute the community's heritage.

Goals for Institutional and Jurisdictional Partnerships

Goal 1: Information Exchange

Exchange information, coordinate services, and arrange for joint use of facilities between the City and its institutional partners.

Goal 2: Regional Planning

Work collaboratively and coordinate efforts with neighboring jurisdictions.

Goal 3: New Partnerships

Identify new institutional/jurisdictional partnerships, as needed to achieve regional goals.

Chapter 2:

Fredericksburg Today: A Community Profile

Introduction

Fredericksburg, Virginia encompasses approximately 10.5 square miles of land, midway between Washington D.C. and Richmond, Virginia. The City is within the George Washington Regional Planning District (Planning District 16), which includes Fredericksburg and four counties. The 2010 Census count shows this planning district as having a population of 327,773 persons, and growing. The City is the regional center for administration, professional services, finance, higher education, medicine, and commerce.

Population

Fredericksburg's population grew significantly between 1980 and 1990, due to development as well as annexation of a 4.4 square mile area. Growth between 1990 and 2000 was slower, but began to increase substantially after 2000. Population changes are shown in Table 2-1, but the growth trend has diminished as the residential development at Idlewild nears completion.

Table 2-1. Fredericksburg's Population Growth

Year	Population	Percentage change
1950	12,158	20.1
1960	13,369	10.0
1970	14,450	8.1
1980	15,322	6.0
1990	19,027	24.2
2000	19,279	1.3
2010	24,286	26.0
2014 estimate*	28,213	16.2

Source: U.S. Census Bureau; *Weldon Cooper Center

Population Projections

The Weldon Cooper Center for Public Service (University of Virginia) is a recognized source of reliable and up-to-date statistical information. Additional demographic and economic data comes through the Virginia Employment Commission (VEC). The various growth projections shown below are consistent with data that is used by state and local governments throughout the Commonwealth. Fredericksburg's projected growth is shown in Table 2-2.

Table 2-2. Fredericksburg's Overall Population Projections

Census	Population	Percent Increase
2010	24,286	25.97
2020	26,646	9.72
2030	28,384	6.51
2040	29,926	5.40

Source: U.S. Census Bureau

Note: The Weldon Cooper Center estimates Fredericksburg's population for 2014 to be 28,213 people, which is higher than what was previously projected for 2020 and shown above. These various figures should be seen in relative terms, though, and compared to similarly derived figures to reveal trends.

The projected growth for the entire region is where the impact of area growth becomes more evident. The Weldon Cooper Center uses available data from the U.S. Census and the VEC, and Table 2-3 shows total population projections for the five jurisdictions that comprise the George Washington Region (City of Fredericksburg and the Counties of Caroline, King George, Spotsylvania, and Stafford). Also shown is the percentage of the regional population that will be residing in the City.

Table 2-3. George Washington Region (PD 16) Population Projections

Year	2010	2020	2030	2040
PD16 Pop.	327,773	429,544	560,154	731,196
City's Pop. (%)	7.4 percent	6.2 percent	5.1 percent	4.1 percent

Source: Weldon Cooper Center

The region's prevailing development pattern is low density suburban, which leaves great physical distances between home and work, home and school, home and shopping and so on. The consequence of this de-centralized development pattern is that it requires significant public investments in infrastructure, which are beyond the capacity of suburban jurisdictions to sustain. State and federal budgets, which have traditionally subsidized the counties, are increasingly constrained, so the transportation needs of the region invariably exceed available funding to address them. Local jurisdictions have recognized they need to reverse the trend of decentralized growth and are using FAMPO's planning capabilities to examine land use and transportation together, to better evaluate potential alternatives. Fredericksburg is already a relatively compact jurisdiction, where planned transportation improvements will better knit the community together and support the national trend of economic development gravitating toward urban centers.

Within the overall projections are more detailed data that suggest the specific impacts of the increasing population. The breakdown of the population projections is shown in Table 2-4.

Table 2-4. Fredericksburg Population Projections by Age Group

Age Group	2010 (Census)	2020 (projection)	2030 (projection)	2040 (projection)
Under 5 years	1,590	1,660	1,766	1,887
5 to 9 years	1,418	1,379	1,517	1,572
10 to 14 years	1,083	1,233	1,248	1,334
15 to 19 years	2,389	3,156	2,973	3,287
20 to 24 years	3,948	4,251	4,690	4,768
25 to 29 years	2,216	2,085	2,669	2,526
30 to 34 years	1,592	1,809	1,887	2,093
35 to 39 years	1,402	1,609	1,467	1,887
40 to 44 years	1,330	1,364	1,501	1,574
45 to 49 years	1,431	1,399	1,556	1,425
50 to 54 years	1,322	1,349	1,340	1,483
55 to 59 years	1,163	1,378	1,306	1,459
60 to 64 years	989	1,149	1,136	1,135
65 to 69 years	677	945	1,085	1,033
70 to 74 years	502	788	887	881
75 to 79 years	444	458	620	715
80 to 84 years	396	290	441	499
85 years & over	394	344	295	368
Total	24,286	26,646	28,384	29,926

Source: Weldon Cooper Center

Based on this breakdown, the Weldon Cooper Center projects the City's future population to have a school age population of approximately 4,000 children by 2020. Following that growth period, however, the number of children is projected to remain relatively stable, through 2030, but will increase again by another 450 children (approximately) by 2040. The Fredericksburg Public Schools has also calculated a school age population of approximately 4,000 children in 2020, but estimate an increase to approximately 4,300 children by 2024. The impact of these projections on the City's schools are discussed further in Chapter 4

The elderly population is projected to increase in real numbers, but remain a relatively constant percentage of the overall population. The population 55 years and over is projected to increase from 18.8 percent of the overall population to around 20 percent. The elderly population, if defined as those persons 60 years and older, constitutes 14 percent of the overall population and is projected to comprise no more than 15.5 percent of Fredericksburg's citizens.

The relatively minor growth in the elderly population is based on Census data that shows a significant demographic trend. Since the mid 2000s, more young families are staying in Virginia's urban areas to raise children and enroll them in urban school systems. Previously, many families chose to move to the suburbs before enrolling children in school. At the other end of the demographic spectrum, retirees are drawn to urban areas, where they find services, entertainment, and cultural opportunities, but they are choosing to actually reside in the surrounding suburban jurisdictions, where they find lower housing costs.

Virginia's independent cities are projected to see growth in young couples with children, which will invariably cause school enrollment to increase. On the other hand, this trend includes people in their prime working years, drawn to an urban environment where they anticipate helping to pay for urban amenities, including good schools.

Racial and Ethnic Diversity

In 2000, 73 percent of the City was white, 20 percent African-American, and the rest classified as other races. By 2010, the white population had dropped as a percentage, while the percentage of African-American residents had increased slightly. Of interest is the continuing increase in the Hispanic/Latino community. In 2000, 4.9 percent of the population was defined as Hispanic/Latino. Ten years later, this ethnic group had increased to 10.7 percent. The Hispanic/Latino population is also an ethnic designation that overlaps racial categories, as shown in Table 2-5, below.

Over time, the City's racial composition is expected to change, as shown in Table 2-6. White and African-American groups will grow slightly in real numbers, but diminish as a percentage of the overall population. The percentage of other racial groups will grow and the ethnic Hispanic

Table 2-5. Racial Diversity in Fredericksburg, 2010

Race	Census	Percentage of Total
White	15,596	64.2
African-American	5,498	22.6
Asian	689	2.8
Other	2,503	10.3
Ethnicity		
Hispanic/Latino	2,607	10.7

Source: U.S. Census Bureau

population will continue to increase significantly. These categories should not be interpreted as being scientific or anthropological in nature. Instead, they reflect self-identification during the 2010 Census count, according to the groups with which people identify.

Table 2-6. Population Projections by Race/Ethnicity

Race	2020 pop.	Percent	2030 pop.	Percent	2040 pop.	Percent
Total	26,646		28,384		29,926	
White	15,220	57.1	15,084	53.1	15,288	51.0
African-Am	6,524	24.5	6,442	22.7	6,246	20.9
Asian	1,080	4.1	1,435	5.1	1,826	6.1
Other	3,822	14.3	5,423	19.1	6,566	21.9
Ethnicity						
Hispanic/Latino	4,037	15.2	5,588	19.7	6,860	22.9

Source: U.S. Census; VEC

Economic Context

The City of Fredericksburg is located at the southern edge of the Washington-Arlington-Alexandria Metropolitan Statistical Area (MSA). This entire MSA has a population of 5.4 million and is the ninth largest MSA in the nation. The largest employer in this MSA is the sector known as Professional, Scientific, and Technical Services, with reported overall sales of \$98.1 billion in 2007. The next four largest employers in the MSA, in descending order, are as follows:

- Retail trade
- Health care and social assistance
- Administrative and support and waste management and remediation services
- Accommodations and food services

This data on the Washington-Arlington-Alexandria MSA shows the economic context within which the City of Fredericksburg has grown. The City retains its local identity, but its proximity to government employment centers in Northern Virginia and Washington D.C. has had a profound effect on its office, retail, and residential market conditions. Continued investments to improve transportation within the Interstate-95 corridor (both roads and rail) will continue to bring more growth to the Fredericksburg area.

Within the George Washington Regional Planning District, Fredericksburg's economic activity relates to the following four key areas (not listed in order of magnitude):

- A regional retail/commercial center (Central Park and Celebrate Virginia)
- Two major institutions (University of Mary Washington and Mary Washington Hospital/Mary Washington Healthcare)
- History-based tourism and visitation
- Proximity to employment centers in Northern Virginia and Washington D.C.

The City's and the region's population growth are heavily related to jobs in the Washington-Arlington-Alexandria MSA, which is evident in commuter travel patterns.

Commuting Patterns

Over half of the workers who live in Fredericksburg commute to jobs outside the City, primarily to Northern Virginia and Washington D.C. Fredericksburg is also a strong regional employment center in its own right, which brings a large number of people into the City on a daily basis. The influx of thousands of workers to Fredericksburg presents significant economic opportunities. Table 2-7 shows the existing commuting patterns. Table 2-7A shows the top ten places where the commutes to Fredericksburg originate.

Table 2-7. Fredericksburg Commuting Patterns

Commuting pattern	Number of commuters
People who live and work in the area	2,085
In-Commuters	20,670
Out-Commuters	8,804

Net In-Commuters	11,866
(In-Commuters less Out-Commuters)	

Source: Commuting patterns are no longer derived from the Decennial Census. The above data is developed by the VEC, using the U.S. Census Bureau's OnTheMap application and LEHD Origin-Destination Employment Statistics.

Table 2-7A. Commuting Places of Origin

Area of Origin	Workers
Spotsylvania County	6,632
Stafford County	3,905
Prince William County	813
Fairfax County	756
Caroline County	743
King George County	632
Orange County	613
Loudoun County	508
Henrico County	330
Fauquier County	327

Table 2-8 shows types of businesses established in Fredericksburg and the workers employed.

Table 2-8. Employment Distribution in Fredericksburg

Industry Group	Establishments	Percent of total	Employees	Percent of total
Health Care and Social Assistance	309	19.3	6,442	26.4
Accommodation and Food Svcs.	173	10.8	4,125	16.9
Retail Trade	229	14.3	3,740	15.3
Education Svcs.	26	1.6	2,009	8.2
Public Administration	44	2.7	1,194	4.9
Professional Scientific & Technical Svcs.	194	12.1	955	3.9
Finance and Insurance	105	6.6	746	3.1
Other Services	134	8.4	707	2.9
Company Mgmt.	10	0.6	696	2.8
Information	28	1.7	688	2.8

Admin, Support, Waste Mgmt., Remediation	57	3.6	669	2.7
Construction	82	5.1	563	2.3
Wholesale Trade	66	4.1	475	1.9
Real Estate	78	4.9	428	1.8
Arts, Entertainment, and Recreation	20	1.2	383	1.6
Transportation & Warehousing	19	1.2	307	1.3
Manufacturing	23	1.4	223	0.9
Other	6	0.4	75	0.3
Totals	1,603	100	24,425	100

Source: Virginia Employment Commission for third quarter, 2013

The above industry groups are instructive for regional comparisons, but the specific employers show the diversity of the local economy. Like most communities, Fredericksburg's largest employers are public and non-profit institutions. Mary Washington Hospital is the City's largest employer, followed by the University of Mary Washington. The third largest employer is the City government itself. The following list shows the relative size of the City's major employers, in descending order.

Fredericksburg's 50 Largest Employers

- | | |
|---------------------------------------|--------------------------------------|
| 1. Mary Washington Hospital | 26. Temporary Solutions |
| 2. University of Mary Washington | 27. Cracker Barrel Old Country Store |
| 3. City of Fredericksburg | 28. Target Corp. |
| 4. Mary Washington Healthcare | 29. Dream Envy, Ltd. |
| 5. Fredericksburg City Public Schools | 30. The Wood Company |
| 6. WalMart | 31. Coca Cola |
| 7. Wegmans | 32. Kohl's Department Store |
| 8. Snowden Services, Inc. | 33. Minnieland Private Day School |
| 9. Rappahannock Regional Jail | 34. Central Park Fun Land |
| 10. Free Lance-Star Publishing, Inc. | 35. Burger King |
| 11. Rapp. Area Community Services Bd. | 36. Fredericksburg Senior Care, Inc. |
| 12. OS Restaurant Services, Inc. | 37. IHOP |
| 13. Home Instead Senior Care | 38. Mountain Lake Hotel |
| 14. McDonald's | 39. Dare Unlimited, LLC |

15. Rehab Hospital of Fredericksburg	40. Hughes Home, Inc.
16. Lowe's Home Centers, Inc.	41. Giant Food
17. Quarles Petroleum, Inc.	42. Shore Stop Store
18. Rappahannock Goodwill Industries, Inc.	43. Labor Force of Virginia
19. Central Rappahannock Regional Library	44. Fredericksburg Christian School
20. United States Postal Service	45. Essex Partners, Inc.
21. Fredericksburg Orthopaedic	46. W.C. Spratt, Inc.
22. Red Lobster & Olive Garden	47. Chick-Fil-A of Central Park
23. Best Buy	48. Labor Ready Mid-Atlantic, Inc.
24. ECC Enterprises Holding Company	49. Ale House Holdings, LLC
25. The Home Depot	50. Castiglia's Italian Restaurant

Source: VEC; Quarterly Census of Employment and Wages, 3rd Quarter 2013

Unemployment Rate

A community's rate of unemployment is measured as a percentage of the labor force. Table 2-9 shows the City's unemployment rate over an 11-year period. The impact of the economic downturn of 2008 is evident as are the changes beginning in 2012, which suggest that local unemployment is finally beginning to diminish.

Table 2-9. Fredericksburg's Unemployment Rates

Year	Fredericksburg	Virginia	United States
2003	5.2%	4.1%	6.0%
2004	4.7%	3.7%	5.5%
2005	4.4%	3.5%	5.1%
2006	3.9%	3.0%	4.6%
2007	4.5%	3.1%	4.6%
2008	6.0%	4.0%	5.8%
2009	9.7%	7.0%	9.3%
2010	9.6%	7.1%	9.6%
2011	9.6%	6.4%	8.9%
2012	8.5%	5.9%	8.1%
2013	7.6%	4.8%	6.5%

Source: VEC; Local Area Unemployment Statistics

Military Bases

There are three military bases in the region – Marine Corps Base Quantico, Naval Surface Warfare Center Dahlgren, and Fort A.P. Hill. These facilities support research and development, strategic combat planning, and training for the armed forces and several Federal law enforcement agencies. A large number of City residents find employment on, or in support of these military bases as well as federal installations in Northern Virginia and Washington D.C.

Economic Projections

In 2006, The Economic Development Authority (EDA) completed a comprehensive analysis of the City's economic development opportunities, within the larger context of the regional planning district and the Washington-Arlington-Alexandria MSA. Their analysis showed that Fredericksburg was well-positioned to capture a large share of the region's projected office, retail, and residential growth. The 2008 economic downturn temporarily curtailed this economic growth, but the findings and the identified opportunities in the EDA's analysis are still valid within the larger economic context. As a consequence, the areas of the City previously identified for new development and redevelopment will continue to be noted in the specific planning areas where those opportunities exist.

Summary of Conclusions and Trends

Demographics

The available data shows the City population increasing more than ten percent between 2010 and 2020. The various age groups will not all increase in the same manner, though. The elderly population will remain a consistent percentage of the overall population, while the number of young families will increase. Retirees are certainly interested in urban amenities, but many are choosing to live in nearby suburban jurisdictions, where they have access to the City, while presumably finding more affordable housing and paying less in taxes. This trend is different from earlier projections of a heavy influx of older persons into the City, which current statistics do not support.

Schools

Demographic changes are always examined for impacts to local schools and the latest data shows a steady increase of school age children through 2020. This trend is a direct result of younger couples choosing to stay within their urban communities. Previously, a great many

couples would move to suburban jurisdictions when their children reached school age. The accepted wisdom was that suburban school systems were somehow better. Increasingly though, young couples are choosing to place their children in urban school systems and the number of school age children in Fredericksburg is projected to increase to approximately 4,000 children by 2020. After 2020, the Weldon Cooper Center projects the increase in school age children to be much slower, growing by approximately 100 new students between 2020 and 2030. Between 2030 and 2040, however, the Weldon Cooper Center projections show another influx of students, to reach a total of approximately 4,350 students by 2040.

The Fredericksburg Public Schools have done their own analysis and anticipate that they will have approximately 4,300 students by 2024, well before the Weldon Cooper Center projections. The implications of these numbers for additional classroom needs are discussed further in Chapter 4 (Public Services, Public Facilities, and Preserved Open Space).

Economics

From an economic standpoint, the Northern Virginia/Washington D.C. area will continue to be an employment center for a significant number of Fredericksburg residents. This economic dynamic raises housing values locally because people earning higher wages in Northern Virginia/Washington D.C. can afford to pay higher prices for real estate. There is a decided impact on the cost for rental units and on affordable housing in general. Yet even as a significant portion of the population commutes out of the City, Fredericksburg remains a regional hub, drawing more than 20,000 workers into Fredericksburg on a daily basis. This increase in the City's daily population provides significant opportunities for business services, restaurants, and sales. In this context, tourism is not as large an economic factor as has been thought previously, but new special events and large group visits are generating increased visitation, so the visitor economy remains an integral part of the area's vitality and growth.

Part II:

Promoting and Sustaining a Livable Community

Then I say the earth belongs to each generation during its course, fully and in its own right, [but] no generation can contract debts greater than can be paid during the course of its own existence.

Thomas Jefferson

Background

The concept of a sustainable community is that local (and global) needs of the present should be met without destroying or degrading the resources that will be needed by successive generations for their own needs. In basic terms, we need to live within the carrying capacity of our environment. Without attention to the inherent limits of such things as water, tax revenue, and road capacity, communities will inevitably fail in the long-term. As a consequence, responsible decision-making is needed to minimize negative impacts as much as possible, while ensuring a balance between ecological resilience, economic prosperity, political justice, and cultural vibrancy.

One of the challenges in addressing sustainability in a local comprehensive plan is that many of the issues are global in nature. Air quality, biodiversity, ozone depletion, climate change, food production, and many other issues are reasonably beyond a locality's means to address on its own. On the other hand, a locality can certainly play a contributing role to reach a sustainable future. The City has established a broad range of sustainable goals and objectives, but it is important to recognize that the various related activities are interconnected and therefore need to be coordinated. To this end, sustainability/livability issues are referenced throughout this comprehensive plan as factors to help attain a livable community.

Definition of a Livable Community

Livability is defined as the factors that add up to a community's quality of life—the sum of its built and natural environments, its economic prosperity, the community's social stability and equity, its educational opportunities, and its cultural, entertainment and recreational possibilities.

A livable community is a dynamic network of interrelated components, where decision makers understand that adopted policies have an impact on other policies, both positive and negative. This concept relies on jurisdictions recognizing that their communities are multidimensional systems. In this context, planning for livability assigns values to the environmental, social, and economic aspects of a locality's growth and development. This level of coordination has come to be called the *Triple Bottom Line*.

Definition of a Sustainability Ethic

Communities are increasingly exploring the extent to which planning policy and development decision-making impacts the natural environment as well as the social and cultural integrity of their neighborhoods. In the past, economic impacts often dominated planning decisions, but a richer understanding of what constitutes a community's quality of life is revising the decision making dynamic. A strong tax base sustains a thriving and livable city, but the *Triple Bottom Line* builds on this economic health by adding considerations of environmental health and social equity.

Environment, Equity, and Economy: The Triple Bottom Line

Environment - The environmental pillar of the *Triple Bottom Line* refers to conservation of natural resources and reduction of adverse development impacts on eco-systems.

Environmental stewardship takes many forms. A policy related to sustainable design, for instance, can encourage environmentally-sensitive site selection, low impact and pedestrian-oriented development, effective storm water management, and the use of locally-sourced, recycled, and sustainable building materials. The intent is to help the community to live within the carrying capacity of its environment such that economic prosperity and ecological resilience coexist and mutually reinforce one another.

Fredericksburg has already taken important steps to be a responsible environmental steward. As an example, the City has formally protected thousands of acres of upriver riparian lands. In addition, the City provides pedestrian facilities and mass transit as alternatives to automobile

travel, which is also a basic component of environmental and social sustainability. The concept of a livable and sustainable community continues to evolve and additional sustainable growth policies will emerge as the City seeks an environmentally-conscious future.

Equity - A livable community will not easily sustain itself without opportunities and access for all citizens to realize their definitions of success. Disadvantaged and often disaffected constituencies can have as much impact on a community's quality of life as do those who grow the tax base, so it is important to consider policies and decisions in broad terms.

The equity pillar of *Triple Bottom Line* challenges localities to view land use and development decisions in their larger impact on the community's social fabric. Successful communities find ways to leverage economic development decisions to reduce disparities in housing, education, and health. As an urban center, Fredericksburg's equity assets, its concentration of social services, are the strongest in the region. The City's community development programming and close liaison with local agencies providing support services shows a significant commitment to mitigating inequalities. Unfortunately, the City's poverty rate remains high and average median incomes are lower than in surrounding jurisdictions. The challenge in bridging this gap is to continue to emphasize access to economic opportunities, affordable housing, and transportation alternatives.

Economy - The economic pillar of *Triple Bottom Line* relates to the original concept of the bottom-line in its most conventional form, financial prosperity. The City's tax base is indispensable if a livable community is to remain viable in the long term. In this context, localities can creatively expand the scope of economic feasibility and development opportunities in conjunction with other aspects for achieving livability. For instance, incentives for sustainable entrepreneurship (such as tax credits for solar panels or grants for environmental cleanups) is one means of making important sustainability issues more economically viable and accessible to more participants. Sound policies that link allowed commercial uses, residential densities, and historic preservation will also ensure that investment within the City's urban core remains economically feasible and attractive to investors. Virginia localities that have not coordinated these factors perpetually struggle to achieve a self-sustaining central business district.

Principles for a Livable Community

The American Planning Association (APA) has developed a set of standards that capture the various aspects of sustainability/livability that communities can incorporate into their

comprehensive plans. These standards are organized into a framework of six principles. As statements of intent, the principles identify a plan's overall strategy, which is then reflected in goals and objectives. The best practices for each principle are the action tools for their implementation.

A Livable Built Environment

The City's buildings, streets, and utilities shape the quality of life for the entire population. As a consequence, it should function at the highest possible level. The build environment, however, is complex. Where traditional planning has typically treated such activities as land use and transportation separately, for instance, current practice recognizes the interrelation of these various components. The intent is to provide a stronger framework for addressing the locality's and the region's challenges as an integrated whole. An example of this trend is the Land Use Scenario Planning that has been included as part of the regional transportation planning process undertaken by the Fredericksburg Area Metropolitan Planning Organization.

Best practices to support a livable built environment include the following. A fuller discussion of these items is contained in Appendix A.

- 1) Plan for a multimodal transportation network
- 2) Plan for transit-oriented development
- 3) Coordinate transportation with land uses
- 4) Provide complete streets
- 5) Plan for mixed land use patterns that are walkable and bikeable
- 6) Plan for infill development
- 7) Encourage design standards consistent with the community context
- 8) Ensure public facilities, commercial places, and activity centers are accessible
- 9) Preserve and respectfully reuse historic resources
- 10) Encourage green building design and energy conservation

A Respect for Nature

Human beings depend on a healthy natural environment for nourishing food, breathable air, drinkable water, energy, and more. Development and human activity, however, can disturb nature's balance and damage the resources it provides. While some natural resources are

protected through separate functional plans and regulations, an overall coordination can be achieved through comprehensive planning.

Best practices to support a respect for nature include the following. A fuller discussion of these items is contained in Appendix A.

- 1) Protect, connect, and restore natural habitats and sensitive lands
- 2) Provide and protect green infrastructure
- 3) Encourage development that respects natural topography
- 4) Enact policies that reduce the community's collective carbon footprint
- 5) Seek to improve air quality
- 6) Encourage adaptations to climate change
- 7) Encourage renewable energy use
- 8) Reduce solid waste
- 9) Conserve water and ensure a lasting water supply
- 10) Protect streams, watersheds, wetlands, and floodplains

A Resilient Economy

A local economy is comprised of businesses, trades, production facilities, and related activities, but also depends on outside inputs and trends. Consequently, the local employment base is affected not only by local business activity, but also by the decisions of distant firms and governments. With such strong external influences, resilience relies on attention to local assets.

Best practices to support a resilient economy include the following. A fuller discussion of these items is contained in Appendix A.

- 1) Provide the physical capacity for economic growth
- 2) Ensure a balanced mix of land uses
- 3) Ensure multi-modal access to employment centers
- 4) Promote green businesses and jobs
- 5) Encourage community-based development and revitalization
- 6) Provide and maintain infrastructure capacity
- 7) Develop plans for post-disaster economic recovery

Interwoven Equity

Equity involves the fair distribution of benefits and costs. A basic fairness test is to determine whether a decision will serve the needs of the full range of the local population – rich and poor, young and old, native and immigrant. Considerations of equity should be interwoven into the full range of decisions made by the jurisdiction, even when poor, underserved, and minority populations do not participate in the related discussion. As an example, the need for housing assistance programs is evident not because of the participation of the targeted population in the public process, but through careful research and analysis.

Best practices to support the concept of interwoven equity include the following. A fuller discussion is contained in Appendix A.

- 1) Ensure a range of housing types
- 2) Ensure a balance between jobs and housing
- 3) Provide for physical, environmental, and economic improvements in disadvantaged neighborhoods
- 4) Plan for improved health and safety for at-risk populations
- 5) Ensure accessible public services and facilities
- 6) Upgrade substandard infrastructure
- 7) Plan for workforce diversity and development
- 8) Protect vulnerable populations from natural hazards
- 9) Promote environmental justice

A Healthy Community

Health is a state of physical, mental, and social well-being rather than merely the absence of disease or infirmity. In a healthy community, residents are assured that the air and water are safe, that open space and recreation opportunities are convenient to use, that local food outlets are located near neighborhoods, public schools and health care are provided equitably, and active public safety programs are in place.

Best practices to support a healthy community include the following. A fuller discussion is contained in Appendix A.

- 1) Reduce exposure to toxins and pollutants in the natural and built environment

- 2) Increase public safety through reduction of crime and injuries
- 3) Mitigate and redevelop brownfields
- 4) Provide facilities for physical activity and healthy lifestyles
- 5) Provide accessible parks, trails, and open space near all neighborhoods
- 6) Provide for access to healthy foods for all neighborhoods
- 7) Ensure equitable access to health care, public safety facilities, schools, and cultural facilities

Regionalism

Regional planning commissions in Virginia function without regulatory authority, but still provide a perspective that extends beyond local jurisdictional boundaries. A major exception is the metropolitan planning organization, which develops regional transportation plans, as mandated by federal regulations as a condition for the use of federal transportation funds. From the local government perspective, the plans and policies of adjacent jurisdictions have reciprocal impacts and the regional commission helps to address issues with regional implications such as open space and environmental protection, economic development, hazard mitigation, and so on.

Best practices to support responsible regionalism include the following. A fuller discussion of these items is contained in Appendix A.

- 1) Coordinate local land use planning with regional transportation investments
- 2) Coordinate local open space plans with regional green infrastructure plans
- 3) Encourage regional development patterns that can sustain transit
- 4) Continue to promote regional cooperation and inter-jurisdictional agreements for services and infrastructure
- 5) Encourage consistency between local capital improvements and regional infrastructure priorities

Achieving a Livable Community

The *Triple Bottom Line* offers a way to look at a community's quality of life in terms related to specific opportunities and challenges. Although planning for livability may seem intangible and somewhat vague, the concept perhaps becomes clearer when we recognize that Fredericksburg is already rich in livable assets, whether or not they are recognized as such.

This Comprehensive Plan seeks to ensure that the concept of livability is presented consistently throughout the document. For the implementation of livability strategies to be cohesively addressed, however, it may be advisable to expand the role of the City's Clean and Green Commission to include sustainability/livability. This effort would require the Commission to monitor City activities for consistency with the principles identified within this Plan as well as to develop livability programs and strategies that address the quality of life of all who choose to work, play, and live in Fredericksburg.

Livability in Fredericksburg

Fredericksburg's economic identity revolves around its historic downtown, its varied business districts, and the network of road corridors that serve both local and regional needs. The cultural, social, and environmental character of the City, however, is identified with the Rappahannock River, its many neighborhoods, the Fredericksburg and Spotsylvania National Military Park, and institutions such as the University of Mary Washington and Mary Washington Hospital. Each of the following chapters describes existing conditions and then outlines strategic policies and actions that promote and sustain a livable community:

- Chapter 3: Transportation
- Chapter 4: Public Services, Public Facilities, and Preserved Open Space
- Chapter 5: Environmental Protection
- Chapter 6: Business Opportunities
- Chapter 7: Residential Neighborhoods and Housing
- Chapter 8: Historic Preservation
- Chapter 9: Institutional Partnerships

Chapter 3:

Transportation

The purpose of transportation is to bring people and goods to places where they are needed, and to concentrate the greatest variety of goods and people within a limited area, in order to widen the possibility of choice without making it necessary to travel. A good transportation system minimizes unnecessary transportation; and in any event, it offers change of speed and mode to fit a diversity of human purposes.

Lewis Mumford

Background

The City of Fredericksburg lies midway between Richmond, Virginia and Washington D.C. The Rappahannock River was its initial link to the world, followed by roads, railways, and highways that have successively linked the City to the broader economy. Transportation challenges in Fredericksburg fall into two main categories. The first is inter-regional and interstate through-traffic, which includes commuter traffic along major corridors such as Interstate-95, U.S. Routes 1 and 17, and State Route 3. The mode of travel is by automobile, bus, vanpool, and railway. The second category is local transportation within the City boundary, where the mode of travel is both motorized and non-motorized. The overall transportation system includes a coordinated hierarchy of interstate highways, regional arterial roads, local collector roads, and neighborhood streets, but the City seeks to ensure the community is accessible to all persons, by emphasizing pedestrian sidewalks and trails, bicycle facilities, and fully accessible transit. This attention to universal accessibility facilitates mixed-use development, promotes economic development, and enhances environmental protection.

A Multi-Modal System

Vibrant urban communities invariably have transportation systems that accommodate a variety of human purposes. To achieve this end, however, planning must ensure the community is open to all of its citizens. Urban places simply do not function well with only one mode of

travel. The most sustainable transportation system is multi-modal – an integrated and balanced system of access and mobility. Individual streets that provide multi-modal opportunities are said to be *Complete Streets* (discussed further below). Key factors in Fredericksburg’s developing transportation system are enhanced public transit, facilities for bicycles/pedestrians, and interconnected streets that reduce congestion and traffic choke points. In effect, this process seeks to reduce unnecessary trips through better design.

The City of Fredericksburg is a member of the Fredericksburg Area Metropolitan Planning Organization (FAMPO), which engages in regional transportation planning. The City’s projects are included in the FAMPO long range plan, which is updated every four years and used to program funding for design and construction. The latest long range plan, adopted in 2013, has a planning window that extends to 2040. Federal regulations require that regional plans be financially constrained, which means that the proposed projects within the plan cannot exceed the amount of funding projected to be available, from all sources, for the period of the plan. Projects that could potentially be added to the constrained long range plan are noted, but additional analysis and identified funding are needed before these are included.

Bicycle and Pedestrian Facilities

Pedestrian access in Fredericksburg is a mixed system. In general, older areas of the City have complete and connected sidewalks and provisions for safe street crossings, factors that make these areas conducive to walking. In 2012-2013, the Fredericksburg Pathways Partners assessed walking conditions on the entire Fredericksburg road network. Their report confirmed that much of the City is rather well connected, but also noted where there are gaps in the sidewalk system as well as safety issues that the Public Works Department has addressed or plans to address. An interdisciplinary Pathways Steering Committee monitors overall bicycle/pedestrian access and develops projects that will address deficiencies as well as expand capacity.

Other areas of the City, such as the neighborhoods along major transportation corridors, were designed for automobile traffic and are not readily adapted to pedestrian use. Recognizing the limitations of only one mode of access, the City has developed a pathways plan that will provide alternate routes for bicycle/pedestrian traffic. The overriding goal is to treat sidewalks and trails as critical infrastructure rather than as amenities, so that everyone has safe access to the entire community. There are many footpaths throughout the City, but the trails noted here have a paved surface and are large enough to serve both pedestrians and cyclists. Their

location is shown on Map 3-1. Table 3-1 shows the length of both the existing as well as planned multi-use trails.

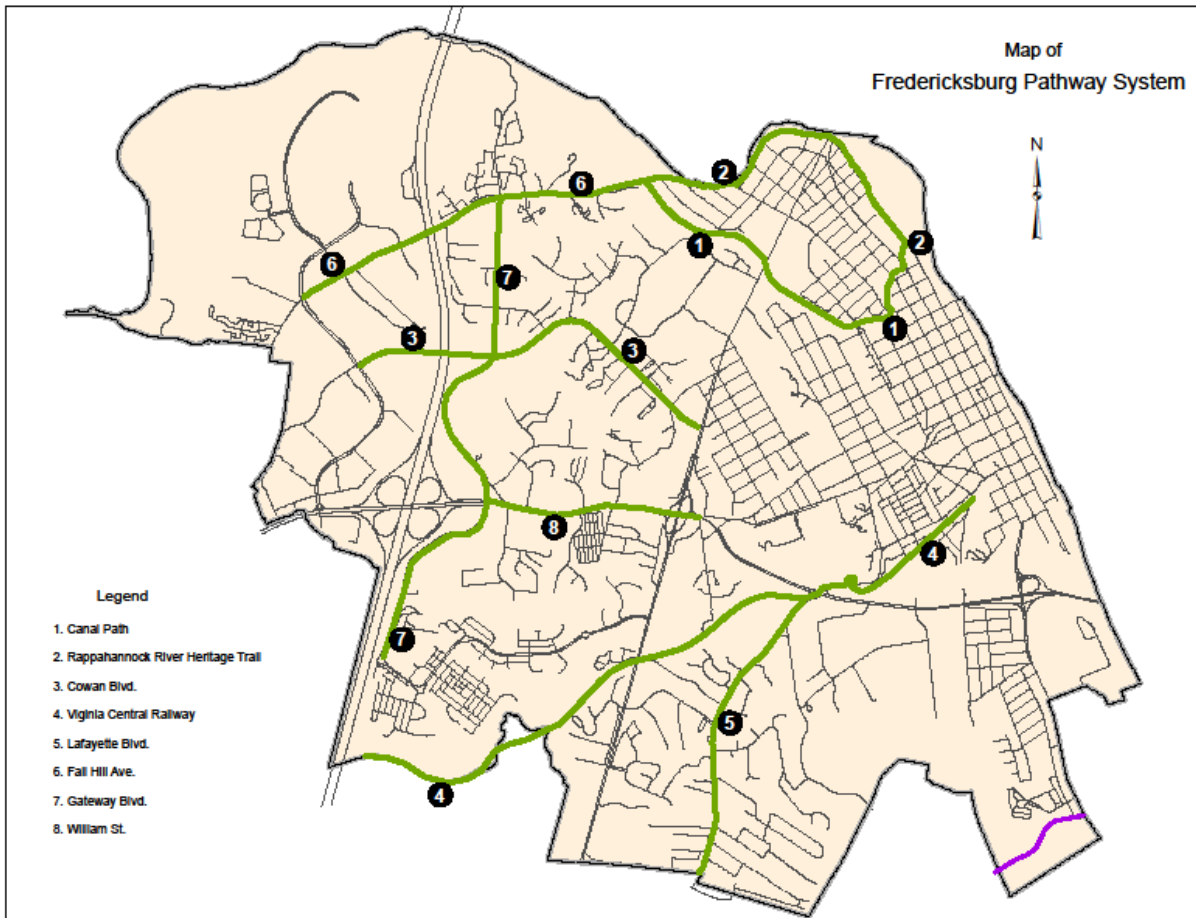
Table 3-1. Fredericksburg's Paved Trails Network

Name	Length (in miles)	Status
Canal Path	1.5 (Pr. Anne St - Fall Hill Ave)	Completed in 1983
Cowan Boulevard	1.75	Completed in 2003
Rappahannock River Heritage Trail	1.6	Completed in 2013 - connects both ends of the Canal Path
Virginia Central Railway Trail	2.5	Completed in 2015
Fall Hill Ave./Mary Washington Boulevard	2.3	Funded – to be built in 2015-16 with new road
Lafayette Boulevard	1.5	Planned; 0.4 miles privately funded
North-South Trail	1.45 (Fall Hill Ave to Route 3)	Planned (privately funded)
Plank Road Trail	1.0	Planned (publicly funded)
Total miles within the network:	13.6	
Total miles completed/funded:	9.7 (71 percent)	

The City has developed a bicycle/pedestrian master plan, called *Fredericksburg Pathways* (2006). Multi-use paths are being constructed as part of all roadway improvement projects. Other trails are being constructed on their own alignment. As trails are developed within the existing roadway system, the inevitable conflicts between different modes of travel must be addressed. Initial construction of a trail usually includes at-grade crossings, with pedestrian signals and appropriate signs to ensure user safety. The long-term goal, however, is to remove at-grade crossings, where practicable. As an example, the new Fall Hill Avenue roadway bridge over the Rappahannock Canal was constructed so the Canal Path would pass underneath it. The following at-grade crossings can eventually be made safer with bridges:

- VCR Trail at Lafayette Boulevard and Blue and Gray Parkway
- VCR Trail at Jeff Davis Highway
- VCR Trail at Interstate-95 (tunnel under interstate to connect to trails in Spotsylvania County)

A private group called Fredericksburg Area Trail Maintenance and User Group (FATMUG) has been developing off-road trails in the areas upstream from the old Embrey Dam site on the Rappahannock River. These facilities are carefully constructed to national standards to avoid erosion and damage to the natural landscape. To reach these challenging recreational



Map 3-1. Fredericksburg's Trail Network

trails, FATMUG has also constructed a pathway along the Rappahannock River that links the unpaved road from Fall Hill Avenue to the old dam site and the natural surface trails in the area beyond. As with the recreational trails, this riverside trail has been built to nationally recognized standards for trails that must course through wet terrain.

In addition to the local trail network, the City has worked with the East Coast Greenway Alliance to bring that major north-south recreational route through Fredericksburg. This 2,900 mile network of multi-use trails is a work in progress (850 miles constructed), connecting cities, suburbs, and countryside from Maine to Miami. This urban version of the Appalachian Trail crosses the Rappahannock River on the Chatham Bridge and planned improvements to the bridge will provide a safer crossing than currently exists on that 1940s-vintage structure. At present, a one-mile section of the Virginia Central Railway Trail (from Essex Street to the Blue and Gray Parkway) has been designated a portion of the main route of the East Coast Greenway. This section is an off-road alignment, which is preferred for enhanced safety.

Keeping bicycle/pedestrian traffic separate from vehicular traffic is the safest option for a multi-use trail, but not always feasible in areas of the City already developed. In downtown Fredericksburg and other long established parts of the City, cyclists will need to share the road with vehicle traffic. The limitation is available right-of-way. Many City streets are wide enough for travel ways and for on-street parking, but adding a five-foot wide bicycle lane is not feasible on most routes. If such lanes were to be added, on-street parking would need to be removed. As an alternative to designated bicycle lanes, cyclists can share vehicular travel lanes and some City streets are marked to show that motorists must share the road with cyclists. The standard pavement marking to designate a shared road is called a Sharrow. As the trail network comes together, the City's Pathways Steering Committee will evaluate additional shared roadway options, to ensure a fully interconnected network.

Streets

A number of major transportation routes run through the City of Fredericksburg. Interstate-95 bisects the City on a north-south axis, with Washington D.C. to the north and Richmond to the south. Another major north-south road is U.S. Route 1. Roads running east-west include State Route 3 and U.S. Route 17. A network of collector and local streets provide mobility around the City as well as connections to these primary routes.

Two sets of one-way streets were established to accommodate through-traffic within Fredericksburg's downtown. The William – Amelia Streets corridor serves east-west traffic,

while the Princess Anne – Caroline Streets corridor handles north-south traffic. To enhance safety and promote development, consideration should be given to returning the existing one-way traffic patterns to traditional two-way traffic and/or expanding on-street parking to help reduce speeds (traffic calming). Challenges, however, include a lack of alleys and loading zones for downtown deliveries. At present, curbside management consists of allowing delivery trucks to block a lane of traffic, which makes the second lane critical to continued circulation.

A major road improvement project currently underway is the widening of Fall Hill Avenue. The scope of work also includes construction of a new road between Fall Hill Avenue and Mary Washington Boulevard, which will provide a connection to the U.S. Route 1 Bypass. This project includes a new bridge across Interstate-95, an improved intersection at Mary Washington Boulevard and the U.S. Route 1 Bypass, and provision of bicycle and pedestrian facilities.

Fredericksburg has two major barriers to travel. The Rappahannock River blocks north-south travel and Interstate-95 constrains east-west travel. There are five river bridges within the City, including Interstate-95, the Falmouth Bridge (U.S. Route 1 Bypass), the Chatham Bridge (Business Route 3), the railway bridge, and the Mayfield Bridge (State Route 3 Bypass). For east-west travel, there are three roads that cross over the interstate in Fredericksburg – State Route 3, Cowan Boulevard, and Fall Hill Avenue. Interstate-95 is part of the National Highway System and the only interchange within the City is at State Route 3.

Table 3-2 identifies projects within the City of Fredericksburg, for which funding is anticipated to be available during the 25 year period of the constrained regional plan. Table 3-3 shows roadway needs that could not be included in the FAMPO long range plan because funding is not anticipated to be available until after 2040. Map 3-2 shows the location of these roadways.

Complete Streets

The basis of complete streets is to develop integrated, connected networks of streets that are safe and accessible for all people, regardless of age, ability, income, or chosen mode of travel. Complete streets make active transportation (walking and bicycling) convenient; provide increased access to jobs, commerce, and schools; and allow greater choice for travel. Each street has its own context, but the intent is to provide pedestrian connections, bicycle ways, and transit stops, as appropriate to the travel route.

Fredericksburg's historic street grid has provided an excellent basis for an interconnected network of complete streets. The City has improved this network through enhanced pedestrian signals, designation of shared travel lanes for vehicles and bicycles, and accessible ramps at street corners. The City also routinely designs its new and expanded roadways to enable access by all citizens. A safe walking and bicycling environment also improves public transportation.

Complete streets will not necessarily extend over the complete transportation network. Some roadways (such as interstate highways) prohibit specified users, while the cost of retrofitting other roads, such as State Route 3, may prove disproportionate to the need or probable use. In these instances, the City will accommodate the alternate users on other nearby facilities.

In an urban context, the following standards are consistent with the conceptual design of complete streets:

- Block length between 300-500 feet
- Street lanes no greater than 11 feet wide
- On-street parking
- Sidewalks/trail connections
- Crosswalks clearly marked and convenient
- Curb extensions that reduce the length of crosswalks
- Trees, closely spaced to provide shade

For urban infill, it is also important to consider the street characteristics when defining setbacks for the new development. Infill housing needs to reflect the geometry of the existing neighborhood street, whether the front wall abuts the sidewalk in a downtown setting, or is set back to be consistent with the geometry of the neighborhood.

Highways

Interstate-95 serves as the primary north-south highway for the Eastern United States. This route carries more than 160,000 vehicles per day through the Fredericksburg region and congestion and safety are constant considerations. The Virginia Department of Transportation is constructing high occupancy vehicle/toll lanes within the interstate alignment. These express lanes will increase the capacity of the interstate, but manage traffic congestion by encouraging car-pools of three persons or more. Car pools will not pay a toll, but vehicles occupied by less than three persons will be able to use the express lanes by paying a variable toll, based on traffic. The HOV/HOT lanes will be extended through Fredericksburg by 2025, which will have a profound impact on the City's growth and development.

A new interchange is also planned in the Celebrate Virginia area, to relieve congestion at the Interstate-95/State Route 3 interchange by diverting commuter traffic to a point farther west on State Route 3. Improvements and reconstruction are planned for the Route 3 interchange.

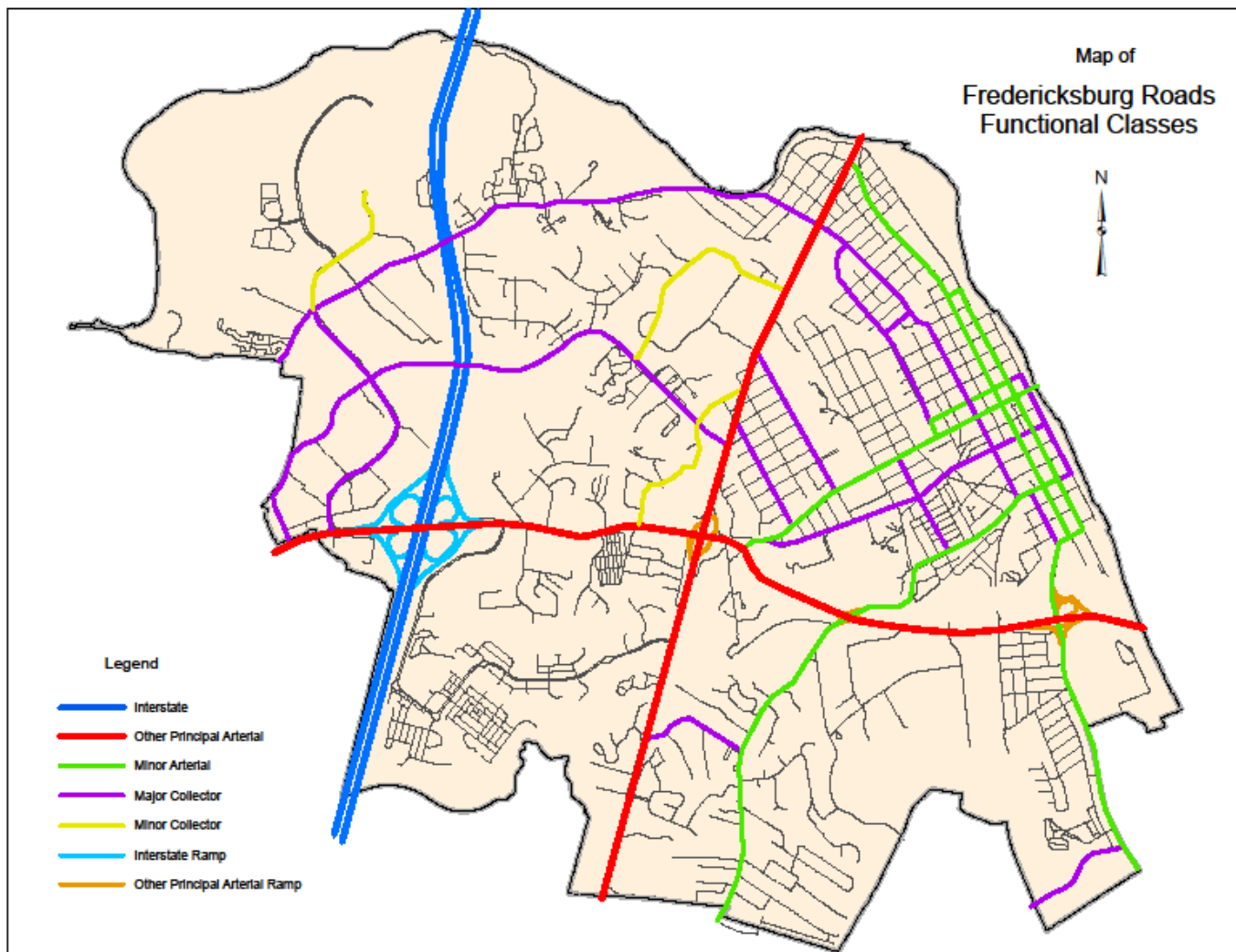
Table 3-2: FAMPO 2040 Constrained Long Range Plan - Fredericksburg Projects.

Street Name	Location (From-To)	Description	Cost/Time Frame
Interstate-95 (Regional)	Between U.S. 17 and State Route 3	Improvements and interchange reconstruction	\$20,000,000 2016-2020
Interstate-95 (Regional)	Between U.S. 17 (Stafford) and State Route 3	Improvements and new interchange	\$10,000,000 for preliminary engineering/ 2016-2025
Interstate-95 HOV/HOT Lanes (Regional)	Garrisonville Rd. (Stafford) to Exit 126 (Spotsylvania)	Add HOV/HOT lanes	\$735 million/ 2021-2025
Rappahannock Parkway Toll Road (Regional)	Interstate-95, at Celebrate VA, to Gordon Road (Spotsylvania)	Construct limited access toll road	\$1,000,000 for preliminary engineering/ 2016-2020
Falmouth Bridge (Regional)	U.S 17 (Falmouth intersection) to Princess Anne Street	Replace bridge with 6-lane facility, with bicycle/pedestrian facilities	\$51,049,000/ 2021-2025
Lafayette Boulevard	Blue and Gray Pkwy to Sophia Street	Roundabout at Kenmore Avenue; parking; intersection safety improvements	\$5,160,000/ 2021-2025
Lafayette Boulevard	South city limit to Blue and Gray Pkwy	Widen to 4-lane divided road with bicycle/pedestrian facilities	\$2,000,000 for preliminary engineering/ 2021-2030
Gateway Boulevard, extended	William Street to Cowan Boulevard	Construct 4-lane divided road with bicycle/pedestrian facilities	\$15,000,000 (private)/when development occurs
Gateway Boulevard extended	Cowan Blvd to Fall Hill Ave	Construct 4-lane divided road with bicycle/pedestrian facilities	\$15,000,000 (private)/when development occurs
William Street	Gateway Blvd. to Blue & Gray Parkway	Widen to 6 lanes with bicycle/pedestrian facilities	\$28,122,000/ 2026-2030

U.S. Route 1 Bypass/State Route 3 interchange	Interchange	Replacement study	\$5,700,000 for preliminary engineering/ 2031-2040
U.S. Route 1 Bypass/ William Street	Interchange	Replace bridge (no added capacity)	\$6,036,000 for study/ 2016-2020
U.S. Route 1 Bypass	Hazel Run bridge	Replace bridge (no added capacity)	\$3,936,000/ 2016-2020
U.S. Route 1 Bypass	Canal bridge	Replace bridge (no added capacity)	\$4,351,000/ 2016-2020
U.S. Route 1 Bypass widening	Telegraph Road (Stafford) to Massaponnax Church Road (Spotsylvania)	Widening and operational improvements	\$11,000,000 for preliminary engineering/ 2021-2040
Princess Anne Street	U.S. Route 1 Bypass to Herndon Street	Road resurfacing, drainage improvements	\$1,480,000/ 2016-2020
Chatham Bridge (Regional)	Rappahannock River bridge	Replace bridge (no added capacity), bicycle/pedestrian facilities	\$42,978,000/ 2031-2035
Fall Hill Avenue/Mary Washington Blvd.	Gordon W. Shelton Blvd. to Mary Washington Blvd.	Widen Fall Hill Ave. to four lanes, with bicycle/pedestrian facilities; extend Mary Washington Blvd.	\$47,726,000/ 2016-2020

Table 3-3: Projects Not Yet Included in the Long Range Plan (financially constrained).

Street Name	Location (From-To)	Description	Anticipated Cost
Interstate-95	Interstate-95, at Celebrate VA, to Gordon Road (Spotsylvania)	New interchange and limited access toll road	\$400,000,000 for right-of-way and construction
Lafayette Boulevard	South city limits to Blue and Gray Pkwy	Widen to 4-lane divided road with trail and sidewalk	\$63,836,945 total cost
U.S. Route 1 Bypass	Blue and Gray Pkwy to River	Upgrade with turn lanes and intersection improvements	\$66,000,000
Lansdowne Road	Route 2/17 to City limit	Widen to 4 lanes	\$3,958,665



Map 3-2. Functional Class of Fredericksburg Roads.

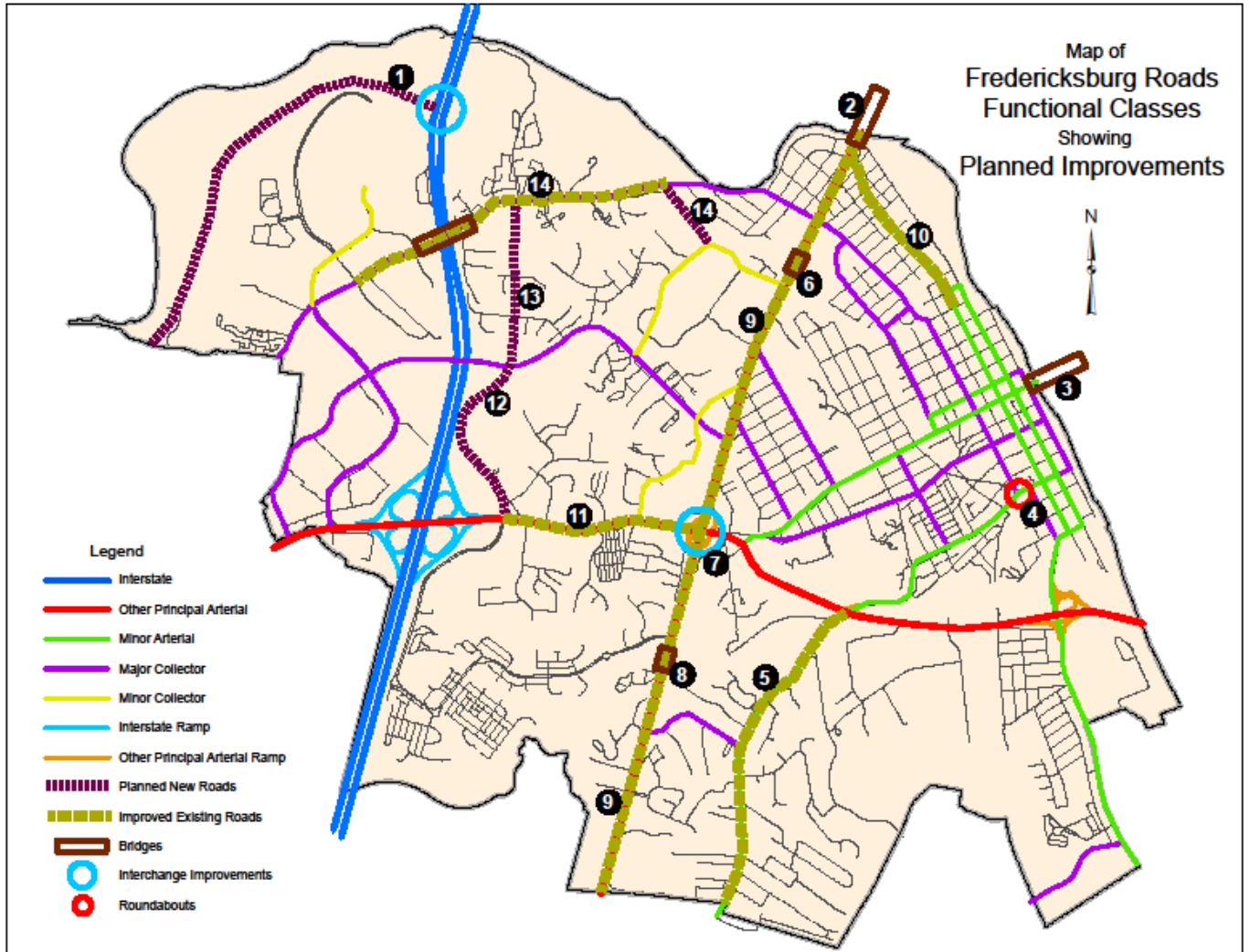
Transit

The City of Fredericksburg operates the FREDericksburg Regional Transit (FRED), a local bus system that also serves the greater Fredericksburg area. It began operations in December 1996 and became an immediate success because of innovative partnerships, attention to modal connections, and a conscientious responsiveness to community needs. In addition to service within the City limits, FRED provides service in the Counties of Spotsylvania, Stafford, and Caroline. FRED also operates an express service, a weekend service for University of Mary Washington students, and shuttle feeder service from outlying parking areas to the downtown rail station. All FRED buses have external bicycle racks.

FRED's main offices are in its Central Transit Center on the U.S Route 1 Bypass, where they also accommodate inter-regional service provided by Greyhound. FRED's Maintenance and Training Facility has been constructed in the Bowman Center, in Spotsylvania County. These facilities are recently constructed and expected to accommodate FRED's needs for at least the next 40 years. Numbers of riders are difficult to determine, but numbers of trips per year exceeds 500,000. Nearly 73 percent of riders use the service three or more times per week, and 45 percent of riders use it five times a week, mainly for trips to work and to shop. For many of these people, FRED is critical to maintaining a measure of mobility and access to jobs, shopping, and medical facilities.

FRED is able to use federal and state transportation funds. Additional funding comes from local jurisdictions, institutional partners, passenger fares, and from Greyhound. Institutional partners include Mary Washington Healthcare, the University of Mary Washington, the Free Lance-Star, WFLS Radio, and Germanna Community College. County funding is tied to the routes and services the local jurisdiction desires. The future growth of the system will depend on whether local jurisdictions are willing to provide their share of costs for their local service.

Bus service has grown significantly, but riders have expressed a need for additional service that helps them get to work earlier and return later. Riders are also interested in weekend service. When service started in 1996, FRED operated five vehicles on four routes, serving mostly the City and parts of Spotsylvania County. In 2014, FRED had 30 vehicles on 21 routes, serving the City and the Counties of Spotsylvania, Stafford, and Caroline. King George County has opted not to have FRED provide transit there.



Map 3-3. Fredericksburg's Roadways Plan.

Road Improvement Projects (keyed to Map 3-3)

1. Rappahannock Parkway Toll Road, with new interchange
2. Falmouth Bridge replacement
3. Chatham Bridge replacement
4. Lafayette Boulevard roundabout at Kenmore Avenue and safety improvements
5. Lafayette Boulevard widening
6. U.S. Route 1 Bypass Canal Bridge replacement
7. U.S. Route 1 Bypass/State Route 3 interchange improvements
8. U.S. Route 1 Bypass Hazel Run Bridge replacement
9. U.S. Route 1 operational improvements
10. Princess Anne Street road resurfacing and drainage improvements
11. William Street widening
12. Gateway Boulevard construction (William Street to Cowan Boulevard)
13. Gateway Boulevard construction (Cowan Boulevard to Fall Hill Avenue)
14. Fall Hill Avenue widening/Mary Washington Boulevard extension
15. Interstate-95 HOV/HOT Lanes (not shown)

Consistent with its emphasis on customer service, FRED is implementing a Real-Time Transit Information System. Such a system will distribute accurate, real-time information on the location and status of buses. Experience shows that riders accessing such information have a more positive experience with transit because they will spend less time waiting for buses, be less concerned about missing an early bus, and have the freedom to finish up an activity when they see that a bus is running late. FRED's Real-Time Transit Information System will become operational in early 2015.

Commuting

While Fredericksburg is a strong employment center for regional workers, thousands of citizens who live in Fredericksburg commute to jobs outside of the City. Interstate-95 and other roads carry an enormous amount of commuter traffic, but other commuting options include rail service, buses, and ridesharing.

The Virginia Railway Express (VRE) provides commuter rail service to Northern Virginia and Washington D.C. and its ridership continues to grow. The VRE is a transportation partnership of the Northern Virginia Transportation Commission (NVTC) and the Potomac and Rappahannock Transportation Commission (PRTC), of which Fredericksburg is a member. Besides the Fredericksburg line, VRE also operates between Manassas and Washington D.C. Service is available Monday through Friday, with inbound trains running during morning rush hour and outbound trains in the evening. There is also an outbound mid-day train.

Fredericksburg has been the southern-most terminus since commuter rail service began in 1992, but Spotsylvania County has joined PRTC, a component of VRE, and a new station is being constructed at the Crossroads Industrial Park, five miles south of the City, where the VRE trains are already being kept overnight. Over 1,200 riders board the VRE on a daily basis at the downtown Fredericksburg station, which is 11 percent of the overall riders on the Fredericksburg line. There are currently over 700 parking spaces devoted to VRE near the Fredericksburg station. The new station in Spotsylvania may provide a short-term relief to parking demand and FRED's feeder bus service helps get commuters to the station without requiring parking, but additional parking at the Fredericksburg station remains a long-term need. The VRE has plans to construct a parking structure on land they own near the station. Projected capacity could be from 1,000-1,500 vehicles. Access to such a facility would be problematic through the existing narrow streets, but a new and direct connection to and from

the Blue and Gray Parkway would avoid introducing more traffic into a residential neighborhood.

A growing number of rail commuters are getting to the rail station on bicycles. Bicycle racks have been installed at the station, but the City's expanding trails network is providing connections to neighborhoods beyond the sidewalk network and larger numbers of commuters are anticipated to use a bicycle on the first leg of their commute. Expanded bicycle storage facilities will be needed at the station, to include both additional racks as well as bicycle lockers. Any bicycle sharing programs established in Fredericksburg could use those same facilities.

Commuter buses provide service from the Fredericksburg area to points north as well as to the Naval Surface Warfare Center at Dahlgren. These buses currently serve in excess of 200,000 riders annually. A rideshare program, called *GWRideConnect!*, matches riders with available service for automobile, van, and bus pools. *GWRideConnect!* also operates a number of park-and-ride facilities (with over 5,300 spaces) and essentially provides travel demand management (TDM) services for the region's commuters.

Parking

To be successful, the developed areas of the City require vehicle access and some level of parking. Parking, however, consumes an enormous amount of space, is expensive to construct and maintain, and often conflicts with other community goals. The notion that ample parking is needed for economic success has begun to give way to the realization that requiring too much parking can hinder downtown revitalization. Parking is also an ongoing issue in many residential areas, including the neighborhoods around the University of Mary Washington and in several downtown locations. The City's challenge is to manage its parking so as to meet development needs (commercial as well as residential) while addressing the community's functionality and safety.

Downtown Parking

A 2006 study examined parking demand in downtown Fredericksburg. This evaluation documented over 2,100 City-controlled spaces – 1,895 spaces on-street and 541 spaces off-street (including the new deck, with 285 spaces). Study data also showed a higher demand for downtown parking during the week rather than on weekends, which is consistent with commuting data and downtown employment. Determining parking needs, however, is

notoriously difficult. Calculations to determine parking demand, for instance, rarely consider factors other than access by private vehicles. In an urban context, parking considerations need to include the role of transit, pedestrian access (available sidewalks, proximity of neighborhoods), and other alternatives to driving. Copying minimum parking standards from other jurisdictions or using standards thought suitable for suburban locations are not useful in an urban context.

Downtown parking needs to be evaluated more comprehensively than simply counting spaces because excessive parking degrades the urban environment. Instead, parking needs to encourage downtown growth and development. An emerging strategy for managing parking includes the following steps:

1. Ensure on-street parking availability through state-of-the-art parking meters that can be managed with variable rates. When demand is low, the price would be low. When demand becomes high, the price increases, with the goal of ensuring that 2-3 spaces per block are always available. Jurisdictions have initially had to overcome citizen opposition to new meters, but established programs have been highly successful and been embraced by the business community.
2. Put parking revenue back into the areas where metered parking is established (rather than placing it in the general fund). Experience shows that the public readily supports paid parking if there are tangible benefits to their neighborhood. Parking revenues can provide additional services as well as enhanced maintenance of sidewalks, landscaping, and alleys.
3. Reduce or remove parking regulations and allow market forces to provide for adequate parking. Removal of regulatory barriers can include the City committing to construct a parking deck, to add capacity that encourages downtown growth and development.

Neighborhood Parking

Parking issues in neighborhoods is about avoiding conflicts with other parking needs. In the neighborhoods around the University of Mary Washington, for example, inadequate parking on-campus and overcrowded rental units has led to severely inadequate parking on-street. This shortage is compounded when residents convert garages to living space, increasing the capacity of the home while reducing its available parking. Permit parking has been implemented in some areas for residents, but this program needs to be evaluated for effectiveness. The University has plans to develop a parking structure to address parking needs, but the City will still need to continue to examine parking needs and impacts in the neighborhoods around the

University as well as its many downtown neighborhoods, where competition for parking is growing.

Alleys

Several areas of Fredericksburg were designed with alleys running through the middle of the blocks. Portions of downtown have mid-block alleys, which provide for critical services without adversely impacting the streetscape. Similarly, several residential neighborhoods have alleys that allow for rear yard garages and a location for overhead utility wires, leaving the streets clear for attractive tree cover. Over time, however, some alleys have been encroached upon and even blocked by buildings and trees. It is important that further encroachments not be allowed and that existing encroachments be removed. When clear of obstructions, alleys can be returned to their function of relieving on-street parking demand and potentially for service needs such as trash pick-up.

Air, Rail, and Bus Service

Air Service

Air connections are available in Northern Virginia, at National Airport and Dulles International Airport, and east of Richmond, at Richmond International Airport. The Stafford Regional Airport has a 5,000-foot instrument runway, full parallel taxiways, and facilities that can accommodate up to 75,000 annual operations and 100 based aircraft. A new interchange on Interstate-95 provides direct access to this general aviation reliever facility. The closest municipal airport is Shannon Airport of Fredericksburg, Inc., which has a 3,000-foot paved and lighted runway and refueling capability. There are also nearby airfields at Hanover County Municipal and Hartwood Aviation, Inc.

Rail Service

Rail freight service is provided by the CSXT Corporation. AMTRAK provides inter-city passenger service. As noted above, the VRE provides commuter rail service to Northern Virginia and Washington D.C. All of these entities use the same north-south tracks. The Virginia Department of Rail and Public Transportation and the U.S. Department of Transportation have begun to analyze projected rail needs in this corridor, to determine the best ways to improve capacity as well as to accommodate high speed inter-city rail service.

The 500-mile corridor extending from Washington D.C., through Richmond, Virginia to Charlotte, North Carolina is being called Southeast High Speed Rail. This intercity passenger rail service will be part of nationwide network where the travel speeds reach 110 miles per hour. The corridor between Washington D.C. and Petersburg is very crowded and proposed improvements consist of a third track within the existing rail corridor. The Virginia Department of Rail and Public Transportation has begun to develop high speed rail plans within a 200 foot wide right-of-way. The third track would require a new bridge over the Rappahannock River and new elevated tracks through downtown Fredericksburg. This project will have a profound impact on the City's downtown station area and provide significant opportunities for an expanded multi-modal center.

Bus Service

Inter-city bus service is provided by Greyhound. Its Fredericksburg terminal is at the FREDericksburg Regional Transit facility on the U.S. Route 1 Bypass (Jefferson Davis Highway). FREDericksburg Regional Transit is discussed under Transit, above.

Freight

Although road development is heavily overshadowed by automobile needs, the movement of goods and services is critical to a locality's economy. This movement of freight can be divided into four broad categories:

- Inter-city and international movements
- Local distribution
- Local pick-up and delivery
- Provision of local services

The logistics of industrial uses has traditionally included in-place investments such as docks, piers, rail sidings, warehouses, and so on. Contemporary logistics, however, are characterized by speed, flexibility and just-in-time reliability that reduces the need for on-site investments. The more exacting shipping and receiving requirements, however, are based on having publicly funded transportation facilities, like highways.

The following factors will need to be considered at all times, to ensure the continued and improved movement of goods and services:

- Curbside management – There are very few loading zones in downtown Fredericksburg, so truck loading and off-loading typically occurs on-street, to accommodate through traffic and parking. Any consideration of altering the paired one-way streets will need to carefully address this issue.
- Freight access – Connections from Interstate-95 to commercial areas must be maintained and enhanced.
- Infrastructure – Multimodal connections for goods and services are as important as multimodal passenger connections.

Transportation and Land Use Coordination

Land use is driven by transportation, whether establishing Fredericksburg as a town at the farthest navigable reach of the Rappahannock River, or investing in the Virginia Railway Express that compliments the interstate highway that links the City to jobs in Northern Virginia and Washington D.C. The Commonwealth of Virginia recognizes this connection between infrastructure and land use and allows localities to designate Urban Development Areas (UDAs), strategic growth areas where development is in close proximity to transportation facilities and where utilities (such as sewer and water) are available. The intent is to support the maintenance and creation of attractive, livable urban communities.

In addition to infrastructure such as roads, rail, airports, and broadband, there is a growing recognition that economic development also needs to capitalize on demographic trends that show people drawn to urban areas. Surveys show that 80 percent of Americans desire walkable communities, where they have transportation options. This high percentage includes younger workers beginning to establish themselves as well as older generations looking to age in place. In this context, localities are encouraged to establish and enhance their sense of place, attracting residents that constitute a quality work force that will, in turn, draw businesses looking to hire them. Employers are not only looking at the available infrastructure, but the quality of the local talent.

Through UDAs, the Code of Virginia has clearly recognized the connection between infrastructure and land use. A statewide plan called V-Trans 2040 emphasizes multi-modal transportation investments as a way for localities to develop compact growth centers and growth corridors. Areas designated as UDAs are considered good places for transportation

funding, but they must incorporate the principles of traditional neighborhood design, which may include, but need not be limited to the following:

- Pedestrian friendly road design
- Interconnection of new streets with existing streets
- Connectivity of road and pedestrian networks
- Preservation of natural areas
- Mixed use neighborhoods, to include both commercial and residential uses as well as affordable housing and a mix of housing types
- Reduction of front and side setbacks
- Reduction of subdivision street widths and turning radii at intersections

The Code of Virginia identifies the levels of development considered appropriate in a UDA and these standards as well as the community attributes listed above are well established in Fredericksburg. For instance, residential densities in a UDA should be at least four single family detached dwellings per acre, six single family attached dwelling units per acre, and/or 12 apartments/condominiums per acre. For commercial development, densities must have a floor area ratio (FAR) of 0.4. The entire City of Fredericksburg meets or exceeds these levels of development, thus the entire jurisdiction can be considered a UDA. Related policies that maintain and enhance Fredericksburg as a strategic growth area are contained throughout this Comprehensive Plan

Transportation Goals

Goal 1: Surface Transportation

Develop the City's surface transportation system to be safe, functional, and attractive, serving multiple modes of travel and making the community accessible to all citizens.

Goal 2: Alternative Modes of Travel

Encourage the use of alternative modes of travel (transit, rail, and trails), to enhance mobility and accessibility and to minimize automobile congestion.

Goal 3: Reduce Congestion

Reduce the auto-centric character of the City and resulting congestion by encouraging the use of alternative modes of travel, to enhance mobility and accessibility. Enhanced and expanded rail services are especially encouraged.

Goal 4: Walkability

Continue to expand the conditions that make Fredericksburg a pedestrian-friendly city, acknowledging that sidewalks and trails are critical infrastructure and not merely amenities. Neighborhoods should be interconnected and outlying areas connected to the city center through safe pedestrian/bicycle pathway networks.

Goal 5: Complete Streets

Ensure the City's transportation system accommodates the safety and convenience of all users including pedestrians, bicyclists, mass transit riders, persons with disabilities, the elderly, motorists, freight providers, emergency responders, and adjacent land users.

Goal 6: Transportation Efficiency

Reduce congestion on existing streets. Minimize potential street congestion resulting from new development. Work with surrounding jurisdictions and the Commonwealth of Virginia to improve regional transportation safety and efficiency.

Goal 7: Transportation Safety

Recognize that the needs of various modes of travel must be coordinated with each other, such that arterial roads provide for the free flow of vehicular traffic while neighborhood streets and the downtown grid maximize pedestrian safety.

Transportation Policies

The following key policy statements will guide transportation development throughout the City:

1. Design complete streets, for new development as well as existing roadways, to integrate automobiles, buses, bicycles, and pedestrians within the same rights-of-way.
2. Maintain the integrity of the City's traditional street grid by keeping streets open.
3. Protect and enhance pedestrian safety by providing appropriate travel routes and by addressing bicycle/pedestrian-vehicle conflict areas, such as intersections.
4. Accommodate pedestrians and cyclists on alternate routes when affected roadways prohibit specified users by law or where the cost of accommodating such alternate modes of travel is disproportionate to need or probable use.

5. Support public transit's long-term viability by promoting development patterns that integrate land uses and multiple modes of travel.
6. Enhance the downtown rail station's multi-modal function by maintaining and expanding bus service, bicycle facilities, and passenger services and amenities.
7. Continue to develop a coordinated system of safe and interconnected bicycle/pedestrian trails throughout the community.
8. Remove at-grade crossings within the bicycle/pedestrian trail system by constructing bridges across heavily travelled vehicle routes, where feasible, and establishing a tunnel under Interstate-95, to connect the City's VCR Trail to the Spotsylvania County trails network.
9. Develop parking policies that are appropriate to an active downtown.
10. Develop structured parking in selected areas to support development/redevelopment goals, especially in downtown.
11. Ensure new development improves connectivity for all modes of travel.
12. Reclaim and maintain the City's alleyways, to relieve on-street parking demand and to handle utilities and services.
13. Ensure adequate room is provided within utility strips for street trees.

Transportation Initiatives

These initiatives outline the key steps for implementing the long-term goals and guiding policies for Fredericksburg's transportation system:

1. Develop pedestrian/bicycle bridges for the VCR Trail at the Blue and Gray Parkway and the U.S. Route 1 Bypass (Jefferson Davis Highway).
2. Develop complete streets standards and guidelines.
3. Actively promote the provision of cycling amenities such as bicycle racks, bicycle lockers, and bicycle sharing at transportation, commercial and recreational destinations.
4. Continue to expand the FRED system by adding capacity, where and when feasible, as well as by maintaining a Real Time Transit Information System.
5. Implement traffic management strategies that mitigate the impacts of traffic growth, such as signal timing upgrades and other intersection control measures.
6. Implement traffic calming measures in neighborhoods where cut-through traffic endangers resident safety.
7. Continue to work with the University of Mary Washington to address parking issues.

8. Continue to explore strategies to reduce conflicts between competing parking needs, especially within residential areas.
9. Continue to seek regional transportation solutions through the regional planning process undertaken by the Fredericksburg Area Metropolitan Planning Organization (FAMPO) and other partnerships.
10. Continue to work toward regional transportation solutions that include an improved Rappahannock River crossing and a new interchange at Celebrate Virginia, South that will divert commuter traffic from the Interstate-95/State Route 3 interchange.
11. Actively examine the potential for redesigning the one-way paired streets (William-Amelia and Princess Anne-Caroline) to better accommodate local traffic, pedestrian safety, and parking.
12. Investigate new concepts in street design, such as shared space intersections that maintain vehicular access while enhancing pedestrian safety.
13. Support the regional interstate project that calls for interchange reconstruction and improvements from U.S. Route 17, in Stafford, to State Route 3 (VDOT UPCs 101595 and 105510).

Chapter 4:

Public Services, Public Facilities, and Preserved Open Space

Background

The City of Fredericksburg is an independent jurisdiction and responsible for providing public services to its citizens. The City government also shares in the provision of several state government functions, such as court services, election administration, education, and social services. Management goals for the various services provided are to meet current needs as well as prepare for projected ones. Priorities for public investment in facilities and services are developed according to the values and policies articulated in this Comprehensive Plan.

The City also controls a significant amount of open space that provides for many recreational uses. Fredericksburg maintains ownership of approximately 4,500 acres of riparian property along both the Rappahannock and Rapidan Rivers. These lands constitute a forested buffer that provides critical environmental protection to the river's water and is also a resource with excellent recreational values. The City is also planning to develop public amenities on land it owns along the downtown urban riverfront, in the area known as Fall Hill, and on a Civil War battleground near Cowan Boulevard.

Public Facilities

City services as well as City-supported state services are provided from locations throughout Fredericksburg (see Table 4-1). The table does not list schools, parks, court buildings, or the downtown library. These types of facilities are noted in other related sections of this chapter. The City recognizes that city hall, various administrative functions, the library, and many other public facilities are properly located in downtown Fredericksburg. Construction of the new court house also occurred downtown, even though there would be constraints to integrating it into the historic setting. Since the ante-bellum years, Fredericksburg's government center has been the Princess Anne Street corridor and building the new court house there was important

to maintaining a healthy downtown community. These public functions help to bring people into the urban core, where they support services and local businesses.

Table 4-1. Location of City Services.

Facility	Function
City Hall (715 Princess Anne Street)	City administration, Treasurer, Commissioner of Revenue,
City Shop (1000 Tyler Street)	Public Works, Traffic Division, Vehicle Maint.
Community Center (408 Canal Street)	Parks and Public Facilities Administration
Dept of Social Services (608 Jackson Street)	Social Services
Executive Office Building (601 Caroline Street)	Fire Dept. Admin., Commonwealth's Attorney, City Attorney, Information Systems, Voting Registrar
Fire Stations (601 Princess Anne Street; 101 Altoona Drive)	Emergency Services, Hazardous Materials Team
FREdericksburg Regional Transit (1400 Jefferson Davis Highway)	City and regional bus service
FRED Maintenance Facility (Bowman Center)	Maintenance operations for FRED buses
Parking Deck (100 Wolfe Street)	Public parking facility with 285 spaces
Police Station (2200 Cowan Boulevard)	Police Services, Crime Prevention, Animal Control
School Administration (817 Princess Anne St.)	School Board, Superintendent of Schools
Wastewater Treatment Plant (700 Beulah-Salisbury Drive)	Sewer plant operations
Water Treatment Plant (Mott's Run Reservoir)	Waterworks
Visitor Center (706 Caroline Street)	Tourism, Economic Development

Education

Fredericksburg Public Schools

Fredericksburg maintains a commitment to excellence in its public education system, which is fully accredited. Expenditures by the schools are derived from federal, state, and local funds. A common comparative measure in education is cost per pupil. Fredericksburg's cost per pupil in 2013 was \$11,664, which included administration, instruction, student services, student

transportation, operation and maintenance, fixed costs, special education, and the state share of teacher retirement and social security.

Students in the Fredericksburg school system progress through their grades together. All of the first graders, for instance, are at one school, and they will move from school to school as a group. It is thus possible to graduate from high school with the same school mates that one started with in kindergarten. This system not only makes the student body exceptionally cohesive, but also gives the school administration the flexibility to distribute classes between the various schools, as needed, when some classes are demographically larger than others. Table 4-2 shows Fredericksburg five schools. These facilities meet modern standards for educational institutions, except for the Old Walker-Grant School, which needs extensive upgrades to be kept safely in use.

Table 4-2. Fredericksburg Schools

School	Location
Hugh Mercer Elementary School (K-2 nd)	2100 Cowan Boulevard
Lafayette Upper Elementary School (3 rd -5 th)	3 Learning Lane
Walker-Grant Middle School (6 th -8 th)	1 Learning Lane
James Monroe High School (9 th -12 th)	2300 Washington Avenue
Old Walker-Grant School (Special programs)	200 Gunnery Road

Public School Enrollment Trends

The number of students enrolled in City public schools in September 2014 was 3,306. The school population has been growing steadily for several years and continued growth is anticipated. The Weldon-Cooper Center has projected a school enrollment of 4,000 students by 2020. After that, the demographic trend suggests a more stable school population through 2030 and then another jump to an estimated 4,350 students by 2040. The Fredericksburg Public Schools, however, has done its own calculations and anticipates having 4,000 students by 2020 and 4,300 students by 2024. The current capacity of all Fredericksburg schools is 3,994 students.

The Fredericksburg Public Schools Board would like to renovate the Original Walker-Grant School to accommodate anticipated growth in pre-Kindergarten students as well as to consolidate administrative functions there. This step will free up space in the existing facilities, where the grade structure can re-aligned, as needed, to handle the demographic changes of the

school age population. The anticipated 4,300 students by the year 2024, however, will require that there be available new classrooms for the projected 300 additional students. The Original Walker-Grant and Hugh Mercer Elementary School do not have space for expansion, but Lafayette Upper Elementary, Walker-Grant Middle, and James Monroe High Schools are designed for additions. Table 4-3 shows the current school usage, as of September 2014, and the additional capacity.

Table 4-3. Fredericksburg Schools Usage, Capacity, and Potential for Expansion

School	Current Usage (2014)	Capacity	Expansion Potential
Hugh Mercer Elementary School	901	940	Limited (trailers)
Lafayette Upper Elementary School	713	1,010	Designed for addition(s)
Walker-Grant Middle School	711	880	Designed for addition(s)
James Monroe High School	981	1,164	Designed for addition(s)
Original Walker-Grant School	Special programs, some offices		Upgrade, consolidate offices
Total	3,306	3,994	

Given the potential imminent need, the Fredericksburg Public Schools should begin planning immediately for the additions that will be needed by 2024 at the existing schools. The City will need to be prepared for the influx of new students, whether by 2024 or later, and should pursue the following steps:

1. Renovate the original Walker-Grant School to allow consolidation of offices and thereby freeing up space in schools for the expanding student population.
2. Evaluate where new additions will be most effective for meeting the projected needs.
3. Develop initial plans and identify budget needs, while monitoring school age population growth.
4. Initiate construction of planned addition(s) when appropriate.

Schools can be community focal points, as is evident from the older school buildings, some of which are in other uses (Maury Commons, Central Rappahannock Regional Library) while others still function as schools (Old Walker-Grant). There is value in being able to walk to school, but some of the newer schools are not conveniently located for that purpose. There is a strong

national effort to develop safe routes to school, to reduce the heavy reliance on an expensive fleet of school buses. The City should explore a program called Safe Routes to School, both as a way to contain school transportation costs as well as to emphasize schools as integral parts of the community.

University of Mary Washington

The University of Mary Washington was founded as the State Normal and Industrial School for Women, in 1908. It became Mary Washington College in 1938, admitted men in 1972, and attained university status in 2004. It is now a public liberal arts and sciences university, with a 2014 enrollment of 4,464 undergraduate and 706 graduate students. A second campus in Stafford County, completed in 1999, provides graduate programs in business and education. A third campus has been established in King George County, at Dahlgren, as a center for the development of educational and research partnerships.

Community Colleges

Three community colleges are located within commuting distance of Fredericksburg. Germanna Community College consists of two campuses. Its Locust Grove Campus is approximately 20 miles west of the City, on State Route 3, while the Fredericksburg Area Campus is south of the City, near the U.S. Route 17 Bypass. Germanna works with the region's economic development agencies and emphasizes work force development. The third nearby college is the Woodbridge campus of the Northern Virginia Community College, approximately 30 miles north of Fredericksburg.

Private Schools

The Fredericksburg Christian School has three campuses in the region. The facility in the City, at 2231 Jefferson Davis Highway, has classes that range from pre-kindergarten through 5th grade.

Library

The Central Rappahannock Regional Library (CRRL) provides library services to Fredericksburg and three counties. Its headquarters is located at 1201 Caroline Street. There are two branches each in Stafford and Spotsylvania Counties and three branches in Westmoreland County. The intervening King George County has kept itself separate from the regional system.

The Fredericksburg headquarters accommodates a growing collection, to serve an expanding regional population, and incorporates new user technology that allows a range of new services. The Fredericksburg headquarters also has several special collections, including a law library, a talking book collection from the National Library for the Blind, and the Virginiana Room, which contains materials on genealogy and local and state history. The library also provides special programs such as live homework help, interlibrary loan, notary services, assistive services, and services related to the Alliance for Literacy.

To better serve the region, the library staff has developed a long-range plan to expand the well-used headquarters building. The library owns a building at 1208 Sophia Street and the City owns the adjacent 1210 Sophia Street. These structures as well as the existing library annex will be removed and converted to parking, to be accessible from both Caroline and Sophia Streets. The existing parking behind the library will be vacated, to allow construction of an addition to the main library building, to provide an improved and larger auditorium and other public spaces.

The regional library system leases 15,000 square feet of space for administrative functions and collections acquisition, processing, and cataloging. What is needed, though, is a permanent regional Service Center, with up to 25,000 square feet for consolidated offices, acquisition and processing, and environmentally controlled storage for books and equipment. The current leasing costs are shared equally by the City and Stafford and Spotsylvania Counties. Development of a publicly owned Service Center is planned to be similarly shared. The CRRL's existing facilities are shown in Table 4-4.

Table 4-4: Central Rappahannock Regional Library System – Fixed Facilities

Library	Location
Headquarters	1200 Caroline Street, Fredericksburg
England Run Branch	806 Lyons Boulevard, Stafford County
John Musante Porter Branch	2001 Parkway Boulevard, Stafford County
Salem Church Branch	2607 Salem Church Road, Spotsylvania County
C. Melvin Snow Memorial Branch	8740 Courthouse Road, Spotsylvania County
Abraham & William Cooper Memorial Branch	20 Washington Avenue, Colonial Beach
Montross Branch	56 Polk Street, Montross
Blake T. Nelson Memorial Branch	22 Coles Point Road, Hague

In addition to the eight fixed facilities listed above, the Library operates an active Outreach Department, using vans to deliver books to institutions and day care centers and to bring the

benefits of the library to areas previously served by a bookmobile. The outreach is called *Lobby Stop*.

Water and Sewer Services

Water Capacity

Fredericksburg's source of water is the Rappahannock River. All public water is pumped from the river, treated, and distributed to users throughout the City. On two occasions, trans-continental pipelines running across the upriver watershed have ruptured, spilling nearly 100,000 gallons of heating oil in 1980 and over 200,000 gallons of kerosene in 1989. In both instances, the City had to shut its water intake for several days. To protect its water supply, the City developed plans with both Stafford and Spotsylvania County for a more secure and interconnected system.

In 1971, the City had established an impoundment on a tributary stream called Motts Run. The long term plan was to establish a joint water treatment plant there with Spotsylvania County. In time, the City and the County developed a water agreement and a new facility at the Motts Run Reservoir came on line in 2000. With the new plant operational, the City decommissioned and removed its municipal treatment plant on Kenmore Avenue, while the U.S. Army Corps of Engineers demolished the aging Embrey Dam (constructed in 1910), behind which the in-stream reservoir had been so vulnerable to contamination.

Treatment capacity at the Motts Run plant is 12 million gallons per day (MGD), to serve both City and County needs. Fredericksburg is currently allowed 5 MGD of that amount. The plant is already permitted for expansion so the City will eventually be able to receive up to 7 MGD of that facility's full capacity. The permitted expansion is not envisioned for at least 15-20 years though. The City's water use has ranged between 2.5 to 3.0 MGD for the past 10 to 15 years, despite substantial new development. This consistent usage is due to water conservation fixtures as well as attention to the integrity of water distribution lines. The City's water use is also only 60 percent of the currently available allowance of 5 MGD, which means there is substantial additional capacity available without any further investment at the Motts Run plant. Spotsylvania County's water use is growing, but that jurisdiction intends to expand its water treatment capacity at the Ni River Reservoir before considering an expansion at Motts Run.

Sewer Capacity

Fredericksburg has one wastewater treatment facility with a permitted capacity to treat 4.5 MGD. This plant currently treats 3.5 MGD. Through a joint agreement, the City also has another 1.5 MGD available at Spotsylvania County's FMC plant, but is using only 0.3 MGD of this allowance. The City thus has a wastewater treatment capacity of 6.0 MGD and is using 3.8 MGD, or 63 percent of what is available. While the current treatment capacity is substantial, the condition of pump stations and conveyance lines can limit usage and improvements are programmed on a case by case basis.

The City's wastewater treatment capacity could be expanded at its present location, but the best solution for investing in this infrastructure is under study. Fredericksburg and Spotsylvania County are conducting an analysis to determine whether expansion of their existing plants is the most cost-effective option or whether constructing a new joint plant is more advantageous. If a joint plant is constructed with Spotsylvania County, the City's existing wastewater treatment plant would be decommissioned and removed (and the land converted to recreational use).

Solid Waste/Recycling

Fredericksburg provides refuse collection service to City residents, with two collections per week. The City's Department of Public Works disposes of this refuse at the Rappahannock Regional Landfill, located in Stafford County. The regional landfill consists of approximately 800 acres of land, of which 64 acres has been exhausted as landfill space and 74 acres are permitted for current and future land fill activity. An analysis done in 2014 has determined that the landfill has approximately 53 years of disposal capacity remaining. The remaining acreage is used for operations or consists of buffers, park/preservation areas, wetlands, and floodplain.

Recycling activities to meet the state goals involves a joint venture with Stafford County, through the Rappahannock Regional Solid Waste Management Board (R-Board). The R-Board operates and maintains the Regional Landfill as well as several Recycling Centers, one of which is in the Battlefield Industrial Park. Formed in 1987, the R-Board has consistently exceeded the requirements of applicable regulations and in 2007 the Virginia Department of Environmental Quality recognized the Regional Landfill as an Exemplary Environmental Enterprise.

Police

The Fredericksburg Police Department is a full service law enforcement organization that provides continuous protection to the community. It is divided into three divisions: Patrol,

Detective, and Support Services. Each division is commanded by a Captain, who reports directly to the Chief of Police. The department has been awarded full accreditation by the Commission on Accreditation for Law Enforcement Agencies. The Police Headquarters is located at 2200 Cowan Boulevard.

Rappahannock Regional Jail

The Rappahannock Regional Jail is located at 1745 Jefferson Davis Highway, in Stafford County. It serves the City of Fredericksburg as well as the Counties of King George, Stafford, and Spotsylvania. The facility houses convicted criminals who are jailed for a period of up to 12 months and also serves as a temporary confinement facility for inmates awaiting trial or sentencing to a more permanent location. The regional jail board was founded in 1968 and has done an exceptional job in meeting regional needs. The current facility opened in 2000 and was expanded in 2006. It is now 379,000 square feet in size and has a capacity of 2,000 inmates. The average daily inmate population, however, is 1,100 persons. Jail staffing is 372 employees.

Fire and Rescue

The Fredericksburg Fire Department provides fire protection to the entire City. The Department consists of three divisions, as follows:

- Fire Administration – This group handles daily operations, support services, training, and emergency management.
- Fire Prevention – Fire Marshals administer the Statewide Fire Prevention Code and work with other City staff to review development projects.
- Fire Suppression – This group consists of the firefighters who respond to alarms, public service calls, motor vehicle accidents, gas leaks, and other emergency calls. This division consists of three platoons, which provide firefighting and medical assistance capabilities. Each platoon consists of a Battalion Chief, a Lieutenant, two Sergeants, and nine Firefighters/Emergency Medical Technicians/Paramedics.

The Department also provides full-time emergency medical specialists to augment the Fredericksburg Volunteer Rescue Squad. In turn, the Rescue Squad provides emergency medical and ambulance response services throughout the City as well as parts of Spotsylvania and Stafford Counties. The main fire station is at 601 Princess Anne Street and a secondary

station at 101 Altoona Drive. Administrative spaces are at 601 Caroline Street. A third fire station (Fire Station 3) will be built west of Interstate-95.

Court System

Judicial administration is located in downtown Fredericksburg, along Princess Anne Street. In 2014, the Civil and District Courts moved to a newly constructed court house. Several sites had been studied for construction of this major facility, but the City recognized it needed to keep its new court house in the urban core and undertook the design challenge to develop a court building that met all contemporary standards, yet fit within the historic government center of downtown Fredericksburg. The Juvenile and Domestic Relations Court will be in a separate building nearby. The location of the individual courts is shown in Table 4-5. The Juvenile and Domestic Relations Court is shown at 615 Princess Anne Street, but that building is under renovation. The J&DR Court is temporarily located at 601 Caroline Street.

Table 4-5. Fredericksburg Courts

Court	Location	Function
Circuit Court	701 Princess Anne Street	Felonies, civil suits, clerk, records
General District Court	701 Princess Anne Street	Misdemeanors, traffic law
Juvenile and Domestic Relations Court	615 Princess Anne Street	Domestic and juvenile cases

When the Circuit Court moved out of its 1852 building at 809 Princess Anne Street, the historic court house designed by noted architect James Renwick became vacant. The City is exploring options for its reuse, which could be as government offices, although reuse as a museum has also been discussed. The City has initiated an evaluation process to fully study and understand the condition of this recently vacated building that has been at the center of government functions for more than 160 years.

Private Health Services

Mary Washington Healthcare

Mary Washington Healthcare operates two full service hospitals. Mary Washington Hospital, in Fredericksburg, is a 437-bed facility that is ranked as one of the top five hospitals in the Washington D.C. metropolitan area. The hospital's medical staff includes community based

physicians, specialists from Northern Virginia and Richmond, and various health professionals such as physician assistants and nurse midwives. Over 300 area physicians and health care professionals represent more than 45 medical specialties and the hospital includes 15 operating rooms. Mary Washington Healthcare's second hospital is the Stafford Hospital Center, which is a 100-bed, full service, acute care facility.

The Mary Washington Healthcare organization provides 40 health care facilities and services throughout the region. In its 2014-15 rankings, *U.S. News & World Report* placed Mary Washington Hospital in the No. 6 spot in Virginia (of roughly 130 hospitals) and No. 5 out of 56 hospitals in the Washington D.C. metropolitan area. Further, the *U.S. News & World Report* named Mary Washington near the top of Best Hospitals in Northern Virginia, ranking it second only to Inova Fairfax Hospital, with eight high performing specialties. The City has worked closely with Mary Washington Healthcare as it has developed its medical campus and this mutually beneficial relationship will continue.

Other Area Hospitals

The Spotsylvania Regional Medical Center is located south of Fredericksburg. It is a general acute care hospital with a capacity of 126 beds.

Public Health Services

The Rappahannock Area Community Services Board (RACSB) provides community-based services for mental health, mental retardation, alcohol/drug abuse, and early childhood intervention. The RACSB serves the citizens of Fredericksburg as well as the counties of Caroline, King George, Spotsylvania, and Stafford. It provides emergency services, short-term residential care, day support programs, and residential services for persons who need special living arrangements to sustain them in the community.

The Fredericksburg Health Department provides both medical and environmental services. Medical services provided to economically disadvantaged persons address communicable diseases, child health needs, maternal health needs, family planning, and dental health. Medical services for all citizens consist of foreign travel immunization, community education, vital records, maternal and infant care coordination, and Medicaid. Environmental services include regulating activities related to water supply, wastewater treatment, and institutions responsible for public health such as restaurants, day care centers, and adult homes.

Social Service Programs

The City's Department of Social Services administers both financial and social support services programs. Financial assistance helps to provide basic subsistence benefits to low income families and includes monetary grants to help pay for such essentials as housing, utilities, and clothing. The largest income support programs administered by the Department are Aid to Dependent Children, Food Stamps, and Grants to Aged and Disabled. Social support services include Child Welfare Services, Foster Children Services, and Adult Protective Services. The City also purchases certain services for indigent clients such as day care, provision of companions, and employment services.

A variety of non-profit human service organizations complement the work of private and public agencies. In Fredericksburg, these organizations include the American Red Cross, the Rappahannock Area Agency on Aging, Rappahannock Legal Services, the Salvation Army, Habitat for Humanity, and many others. The Rappahannock United Way provides important funding for such groups. A regional Continuum of Care coordinates services for homeless persons, to systematically reduce the homeless population through rapid re-housing and provision of support services, as needed.

Recreational Parks and Open Space

Fredericksburg residents enjoy a variety of public recreational assets. Exclusive of public school facilities, the City maintains a variety of parks, as shown in Table 4-6. In addition to these existing facilities, the City owns additional acreage in four locations that will eventually become parks within the City inventory. These future parks are identified in Table 4-7. The City also controls thousands of acres of wooded riparian lands.

Other government agencies administer properties that provide recreational opportunities within the City. The Virginia Department of Game and Inland Fisheries stocks Motts Run Reservoir and maintains the boat landing there. This state agency also owns and maintains the boat landing at the City Dock, on the Rappahannock River. Federal lands in Fredericksburg are part of the Fredericksburg and Spotsylvania National Military Park. The overall Military Park encompasses more than 7,500 acres across four Civil War battlefields. Within the City limits, the Federal holdings constitute 122 acres.

The Rappahannock River corridor, upstream of the City is a significant recreational asset that also protects Fredericksburg's drinking water. The City acquired 4,800 acres of riparian lands along both the Rappahannock and Rapidan Rivers, in the Counties of Culpeper, Fauquier, Orange, Spotsylvania, and Stafford. A portion of these lands accommodates public drinking water impoundments on the tributary streams of Hunting Run, Motts Run, and Rocky Pen Run. With reservoirs established on tributaries, the in-stream reservoir behind Embrey Dam became obsolete and removal of that dam provided substantial environmental benefits. The free flowing Rappahannock River has allowed anadromous fish to reestablish historic spawning areas in the upriver watershed.

There are no transverse roadways between Interstate-95 and Kelly's Ford and the City-owned riparian corridor extends upstream approximately 25 miles within this relatively remote natural area. The result is an extensive corridor that is attractive for canoeing, bird-watching, fishing, and hunting. The linear nature of the City-owned river corridor is both its strongest characteristic, yet also a significant weakness. In 2006, as part of the ongoing quest to protect the integrity of these lands, the City placed 4,232 acres under a permanent easement held by the Virginia Outdoors Foundation, the Virginia Board of Game and Inland Fisheries, and the Nature Conservancy.

Although this easement benefits the public, the City of Fredericksburg retains the right to control public access to the property as a way to protect sensitive areas and ensure that the riparian lands continue to provide a water quality function. Through carefully controlled access, consistent with adopted watershed protection policies, the City manages the riparian lands as a sustainable recreational resource while also protecting the integrity of the natural setting. Management of the City-owned lands is a function of the City's Public Works Department.

The City's extensive parks and land holdings have significant recreational benefits, but many of these properties also contain historic resources that merit recognition and protection. The Rappahannock valley has been marked by human activity for thousands of years. The landscape is replete with aboriginal settlement sites and hunting camps, water-powered industries, canals and locks, the scars of gold mining, road traces, military entrenchments from the Civil War, and river crossings. These extensive resources show the evolution of the Rappahannock valley from a wilderness, to an industrial corridor, to a battleground, to a somewhat remote recreational corridor.

Table 4-6. Fredericksburg Parks and Recreation Inventory

Park/Facility	Acreage	Uses
Alum Springs Park	34.0	Picnic areas, trails, playground, shelter, restrms
Canal Path	6.0	Multi-use trail, benches
City Dock	4.0	Boat ramp, dock, fishing
Cobblestone Park	10.0	Natural area, walking trail
Cossey Botanical Park	6.0	Open space, gardens, fishing
Dixon Park	49.0	Swimming pool, playing fields, trail
Dog Park	0.5	Off leash area
Hurkamp Park	2.0	Fountain, benches, Farmers Market
Memorial Park	7.5	Tennis courts, basketball court, playground, picnic tables
Maury Park	4.0	Playground, basketball court, picnic tables, benches
Mary Washington Monument	4.0	Memorial, Gordon cemetery, open space
Motts Landing	3.0	Boat launch, fishing
Motts Reservoir	877, which includes 160 acre lake (20 acres in park use)	Boat rental, picnic areas, fishing, nature center
Old Mill Park	50.0	Playground, playing fields, shelters, canoe launch, shelters, restrooms
Powhatan Park	1.5	Playground, benches
Snowden Ball Park	10.0	Baseball fields
Snowden Playground Park	4.0	Playground, basketball courts
Sunshine Park	13.0	Baseball fields, learning ctr
Thornton Cemetery	0.1	Historic cemetery
Washington Avenue mall	2.6	Semi-formal open space
Roadside Parks (Route 1)	0.5	Highway picnic areas
Trail network		Canal Path, Heritage Trail, VCR Trail, Smith Run Trail, etc.
W.L. Harris Park	2.0	Basketball courts, shelter, playground, benches
Total acreage	1,090 (233 acres usable)	

Note: The Community Center at 408 Canal Street is not shown on this table. It is noted in Table 4-1 as Parks and Public Facilities Administration.

Table 4-7. City-Owned Property for Future Parks

Resource	Acreage	Planned Use
Natural area on Fall Hill	56.9	Open space, picnicking, pathways along river bluffs
Zig-zag trenches (Civil War)	4.758	Historic site
Smith Run battle site	11.0	Historic site
Downtown riverfront lots	3.0	Riverfront Park

The City, in partnership with the National Park Service, conducted a reconnaissance survey of the historic resources on the City's upriver lands. The final report is called *Historic Resources Along the Rappahannock and Rapidan Rivers* (1997). The Planning staff also maintains extensive records on historic resources within the City limits.

Additional Recreational Needs

The National Recreation and Park Association and the Commonwealth of Virginia have both developed a measure of what types of recreational facilities should be available to a local population. The type and number of recreational assets considered to be suitable for a city the size of Fredericksburg is shown in Table 4-8. The City's population of slightly more than 25,000 residents and this table shows what is still needed. The recommended golf course is not a City goal because there are already numerous golf courses nearby. The big item of need is a new recreation center. The current center was constructed as a temporary building in the 1940s. The new recreation center is proposed to be constructed at Dixon Park.

Every few years, the Commonwealth of Virginia examines the state's recreational needs and revises its Virginia Outdoors Plan, which details specific recreation activities by region. This plan also estimates demand and then determines the degree to which resources are available. The Outdoors Plan considers both public and private lands and facilities.

The latest Outdoors Plan was released in 2013 and this document makes clear that the Planning District has an abundance of water and open space resources. In addition to the City's extensive riparian lands along the Rappahannock River, there are three state parks within the region and a fourth one that is proposed to become a park, as follows:

- Caledon, 2,587 acres in King George County
- Lake Anna, 3,127 acres in Spotsylvania County
- Widewater, 1,067 acres in Stafford County

- Crow's Nest, 1,100 acres in Stafford County (proposed)

There are also two Wildlife Management Areas within the region, as follows:

- Mattaponi, 2,500 acres in Caroline County
- Land's End, 462 acres in King George County

Table 4-8. Recreation Standards

Activity	Number of facilities per number of residents	Existing - City/Schools	Still needed
Baseball	1 per 5,000	4/2	0
Basketball	1 per 5,000	5/6 (5 indoor)	0
Bicycle/foot trails	2 miles per 1,000	(see Note)	(see Note)
Recreation Center with gym and pool	1 per 25,000	1 pool, 1 gym, 1 rec. center (obsolete)	New rec. center at Dixon Park
Football	1 per 20,000	0/3	0
Golf	9 holes per 25,000	0	1
Soccer	1 per 5,000 (adjusted to local demand)	11/4	0
Softball/T-ball	1 per 5,000	1/2	2
Swimming	1 50-meter pool per 20,000	1/0	0
Tennis	1 per 2,000	8/6	0
Volleyball	1 per 5,000	0/4	1

Note: Using the above standard for bicycle/foot trails, the City should have nearly 50 miles of such facilities. The current trails plan will result in 13.6 miles of multi-use trails. Existing sidewalks throughout the community, however, comprise more than 40 miles of pedestrian walkways (counting only one side of the street where sidewalks exist on both sides), and there are more than 20 miles of existing or planned off-road trails.

The Outdoors Plan indicates a demand for public access to water resources. A new boat launch was recently been installed in Old Mill Park and the City has worked with the Virginia Department of Game and Inland Fisheries to determine suitable locations for boat launches in the upriver areas. The City's policy is to limit public boat ramps to places that can be properly administered, to ensure that remote areas of the river retain their special quality of limited visible human intrusions. A new ramp at Hunting Run, on the Rapidan River, and another canoe launch near the C.F. Phelps Wildlife Management Area (4,539 acres in Fauquier County) deliberately leaves a significant section of the Rappahannock River without visible man-made features, for those recreational users who like a more remote experience.

Trails

The Virginia Outdoors Plan notes a strong demand for interconnected trails, which the City has also emphasized for many years. Trail development in Fredericksburg is handled by an interdisciplinary team from the City Manager's Office, Parks and Recreation, Planning, and Public Works. As noted above, the City's network of multi-use trails is planned to provide 13.6 miles of pathways, which will connect City neighborhoods with the larger community. This trail system will also tie in with the City's extensive network of interconnected sidewalks.

Trails have been proposed to be established on the City's upriver riparian properties, but there are considerable topographic limitations to creating a continuous trail along the Rappahannock River. Much of the City's lands are the steep slopes fronting the river rather than the buildable uplands, which are typically privately owned. Instead of trails on land inhospitable to such purposes, the Rappahannock River corridor functions as a water trail, accessible by water craft, with only limited places available as boat launches. In the tidal portion of the river, the National Park Service has established the Captain John Smith Chesapeake National Historic Trail, which is also a water trail, but where many destinations are accessible by automobile.

Cultural Opportunities

Fredericksburg's quality of life is considerably enhanced by a broad range of cultural activities. The City supports the Fine Arts Commission, recognizing them as a vital part of the community. Member organizations include the Fredericksburg Theater Company, the Fredericksburg Center for the Creative Arts, Harambee 360, the Fredericksburg Festival of the Arts, and the Chamber Chorale of Fredericksburg. Fredericksburg also provides annual funding support to the Bluemont Summer Concert Series and to the Fredericksburg Area Museum and Cultural Center.

Telecommunications Towers

The City of Fredericksburg accommodates and promotes the growth of wireless telecommunications while limiting potentially adverse visual impacts of the necessary towers. To encourage use of the best possible sites and to discourage unnecessary proliferation, the City has identified the following sites and existing structures as the preferred locations for new or altered telecommunications towers:

- City/Courtland Water Tank site (end of Ashby Street)
- City/Powhatan Water Tank site (Powhatan Street)

- City Shop site (Tyler Street and Belman Road)
- James Monroe High School site (adjacent to Jefferson Davis Highway)
- Walker-Grant Middle School site (off Jefferson Davis Highway)
- Hugh Mercer Elementary School site (Cowan Boulevard)
- Wastewater Treatment Plant site (Beulah-Salisbury Road)
- Snowden Park site (Fall Hill Avenue near Bragg Hill)
- Old Mill Park and adjacent City-owned sites off Caroline Street
- Virginia Power Substation site (Powhatan Street)
- National Guard Armory site (Jefferson Davis Highway)
- Central Park
- Mary Washington Hospital medical campus
- University of Mary Washington campus
- Virginia Visitor Center/Rest Area off Interstate-95
- Executive Office Building (601 Caroline Street)
- Verizon Building (Prince Edward Street)

Broadband

Affordable access to telecommunication services is recognized as basic infrastructure and the high performance network capable of providing electronic services is called broadband. The City of Fredericksburg is well covered by broadband service, but the Northern Virginia/Washington D.C. area is home to a vast number of enterprises that support government agencies and require, as an absolute necessity, secure telecom access with redundancies that guarantee uninterrupted service. Many firms looking to relocate or establish themselves in Fredericksburg must have those specific capabilities.

The Fredericksburg business community is seeking partnerships with the regional planning commission to provide enhanced broadband service and the City should consider whether it will participate in this expansion of the local broadband capability.

Goals for Public Services, Public Facilities and Preserved Open Space

Goal 1: Efficient and Effective Public Services

Provide the City's public services in an efficient and effective manner to all City residents.

Goal 2: Safe and Secure Environment

Provide a safe and secure environment for those who live, work, and visit the City, through high-quality public safety facilities and systems.

Goal 3: Education Facilities

Provide high quality education facilities.

Goal 4: Educational System

Provide a quality education that assures opportunity for all students, so that they are encouraged to meet high academic standards and empowered to become productive citizens.

Goal 5: Parks and Open Space

Ensure the City's parks, open space, and recreational programming meets the needs of the full community, including families, youth, seniors, and citizens with special needs, through recreational opportunities, both passive and active, in public parks and on City owned lands.

Goal 6: Clean and Safe Water Supply

Ensure the Rappahannock River continues to function as a clean and safe supply of water for the City and the region. Maintain the natural integrity of the river and its tributaries, for their biological functions that protect the City's raw water supply.

Goal 7: Riverfront

Connect the community to the Rappahannock River, both visually and physically, with parks that provide focal points, have recreational benefits, respect local history, and promote economic vitality.

Policies for Public Services, Public Facilities and Preserved Open Space

The following key policy statements will guide the provision and management of public services, public facilities, and preserved open space:

1. Keep existing public services in the downtown area, as appropriate.

2. Maintain and enhance the visual and functional aspects of the City and its neighborhoods, to include sidewalk improvements, installation of street furniture, and relocation of overhead utility wires (where appropriate and feasible).
3. Work with the Fredericksburg Public Schools to develop a plan for a cost-effective expansion of selected schools, to address the projected student population.
4. Work with the Fredericksburg Public Schools to initiate a Safe Routes to School program.
5. Identify opportunities and mechanisms for private developers to share in the cost and provision of public services and facilities. Examples of such mechanisms include a City proffer policy or impact fees.
6. Enhance and preserve the scenic value of the urban riverfront by establishing a riverfront park as well as clearing invasive trees and bushes.
7. Continue aggressive implementation of the City's Watershed Property Management Plan for the City-owned lands along the river.
8. Expand protection of riparian lands through public acquisition and preservation easements. Support such initiatives in upriver jurisdictions.
9. Continue to protect the historic resources on City-owned lands from looting and ensure recreational users understand the need to avoid damaging such resources as well.
10. Continue to enhance visitor amenities along the City's established trails, such as benches at scenic vistas and wayside exhibit panels at points of historic interest.

Initiatives for Public Facilities and Services

These initiatives outline key steps for implementing the long-term goals and guiding policies for the City's public services, public facilities, and preserved open space:

1. Conduct a comprehensive study of City-owned properties and facilities that are vacant or obsolete, such as the Executive Plaza office building, the old city landfill, the Renwick complex, and the Dorothy Hart Community Center and develop plans for their removal/reuse.
2. Establish a community center in Dixon Park, acquiring additional property, as needed.
3. Rehabilitate the Old Walker-Grant School to extend its functional life.
4. Develop a plan to address the need for additional classrooms within the City's school system, by:
 - a. Providing capital improvement funding to meet school facility needs, and by
 - b. Providing operational funding for appropriate student/teacher ratios.
5. Provide a new Fire Station 3 on the west side of Interstate-95.

6. Establish a new 100-acre park, consistent with restrictive covenants, on Fall Hill.
7. Establish a new park on an 11 acre parcel near Smith Run, when Gateway Boulevard is extended to provide access. Acquire additional acreage in that area, as feasible, to enlarge the public holdings.
8. Establish an urban riverfront park as a focal point for the community.
9. Continue to protect and manage the City-owned riparian lands along the Rappahannock and Rapidan Rivers, with emphasis on protecting trees, halting encroachments, minimizing non-point source pollution, preserving historic and cultural resources, and pursuing additional land acquisition.
10. Review the need for parking along the urban riverfront and find alternatives that maximize the use of on-street parking to offset removal of surface parking within the riverfront park site.
11. Develop a plan for the comprehensive preservation and development of the City's entire urban riverfront, from Fall Hill to Dixon Park.
12. Encourage internet providers to build out their fiber-optic and broadband cable infrastructure, so they can provide the fastest and most reliable service possible to all citizens and businesses.
13. Develop pocket parks throughout the City, to enhance neighborhoods and the community's overall quality of life.

Chapter 5:

Environmental Protection

Background

The City of Fredericksburg encompasses approximately 10.5 square miles and is situated on a pre-Cambrian rock exposure that forms the falls of the Rappahannock River. The Piedmont Plateau lies to the northwest, underlain by hard igneous and metamorphic rock. To the southeast is the Coastal Plain, characterized by unconsolidated clay, silt, sand, and gravel deposits. The Rappahannock River terrace, included in but distinct from these physiographic provinces, is noted for its suitability for agriculture, due to an abundance of rich alluvial soils. The Rappahannock River has also provided the City its primary source of drinking water. Fredericksburg's location provides both ecological benefits as well as environmental challenges.

Soils

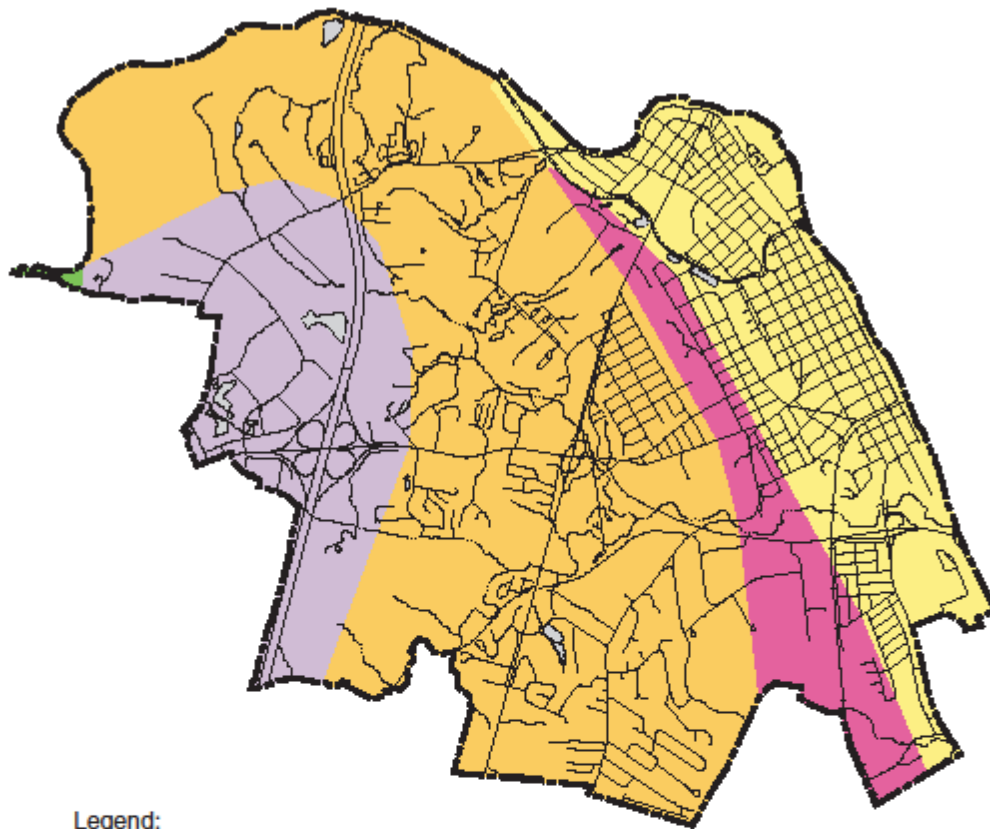
Five major soil associations are represented in Fredericksburg, and shown on Map 5-1. Each association contains groups of soils with individual characteristics related to their physical and chemical composition.

Appling – Faceville – Louisburg






The northwest tip of the City consists of generally well-drained, medium textured, Piedmont and Coastal Plain soils, underlain by weathered granitic parent materials. This association is characterized by low and medium water runoff potential and low to medium erodibility.

Bourne – Faceville

This type of soil is found on broad and steep ridge slopes and is characterized by slow surface drainage and moderate to very slow internal drainage. This association is described as imperfectly to well-drained, medium-textured soils, underlain by stratified gravel and clay. Bourne-Faceville areas have medium to high water runoff potential and medium erodibility.



Legend:

-  Appling-Faceville-Louisburg
-  Bourne-Faceville
-  Stratified Coastal Plain Sediments-Ruston-Faceville
-  Stratified Coastal Plain Sediments-Roanoke-Augusta
-  Stratified Coastal Plain Sediments-Wickham-Altavista

Map 5-1. Soils.

Stratified Coastal Plain Sediments – Ruston-Faceville

Found along the fall line, this association is characterized by well-drained, medium textured Coastal Plain soils, underlain by clay and gravel. This soil has a low to medium water runoff potential and medium erodibility.

Stratified Coastal Plain Sediments – Roanoke-August

This association is located outside the immediate floodplain and is characterized by soil that has a medium to high water runoff potential and medium erodibility.

Stratified Coastal Plain Sediments – Wickham-Altavista

This association includes floodplain soils of the Rappahannock River. These soils are characterized by medium water runoff potential and low erodibility.

Acid Soils

Soils with acid sulfate can degrade concrete, metal, and other building materials and preclude vegetation from being able to take hold after a site has been developed. These types of soils occur naturally, but are sometimes uncovered when land is graded and otherwise disturbed for construction. To address this issue, the City's Building Official worked with the Virginia Polytechnic Institute and State University (VA Tech) to develop a policy and a methodology to guide builders in how to identify and remediate soils with active acidity. Proper attention to this condition prior to construction avoids immediate and long-term problems.

Floodplains

Fredericksburg has experienced river flooding since its earliest settlement. Table 5-1 shows some of the larger floods of record, based on newspaper accounts, historical records, field investigations, and data collected by the U.S. Army Corps of Engineers. The worst flood in the recorded history of the Rappahannock River, in October 1942, was the result of a prolonged general rainfall over the entire watershed followed by a strong east wind and a cloudburst. The public water supply became contaminated, the City lost electrical power for two days, bridges became impassable, and several fires broke out. The flood resulted in severe property damage and some loss of life.

Table 5-1. Rappahannock River Flooding

Flood	Discharge in cubic feet per second (CFS)
May 1771	Unknown
June 1889	96,000
May 1924	66,000
April 1937	134,000
October 1942	140,000
June 1972	107,000

Notes: CFS measured by the U.S. Geological Survey Gauge 01668000.

CFS for 1889 estimated from high water marks.

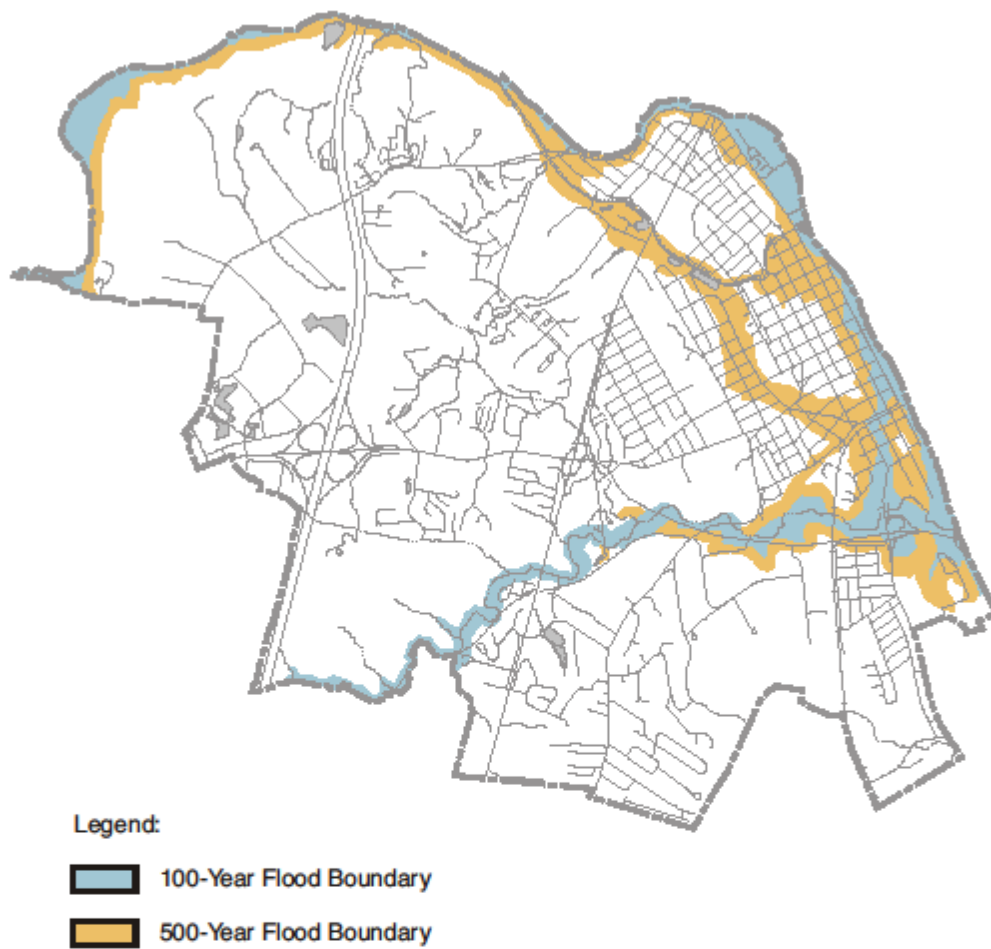
The upriver watershed is extensive and floods can be expected to recur. Minor to moderate flooding is more prevalent in the Spring, but larger and more infrequent floods may occur at any time. Most of the higher flooding resulted from heavy general rains and from intense rainfall produced by hurricanes or tropical storms that moved into the area from the Atlantic or Gulf coasts. These types of storms occur during the period from May through November.

Flood Boundaries

The U.S. Army Corps of Engineers has studied flood hazards in detail to delineate flood boundaries. The resulting maps are used by the National Flood Insurance Program, in which the City is a participant. The Federal Insurance Administration adopted the 100-year flood as a base for floodplain management. The 500-year flood boundary indicates additional flood risk areas. Both the 100-year and the 500-year flood boundaries are shown on Map 5-2. The term 100-year flood does not mean a flood that will occur every 100 years, but rather a flood that has a one percent chance of occurring each year. One hundred year floods can occur more than once in a relatively short period. Similarly, the 500-year flood is a flood whose magnitude has only a 0.2 percent chance of occurring each year.

Floodways

Building on floodplains can increase flood hazards in areas beyond the encroachment because such development reduces the flood-carrying capacity of the floodplain. For regulatory purposes, the floodplain is divided into the floodway and the floodway fringe. The floodway includes the stream channel as well as any adjacent areas that must be kept free of encroachment so that a 100-year flood can be carried without substantial increases in flood heights. The floodway fringe, on the other hand, encompasses the portion of the floodplain



Map 5-2. Flood boundaries.

that can be obstructed without increasing the water surface elevation of a 100-year flood more than 1.0 feet at any point, although construction must meet Building Code requirements for development in those areas. As a consequence of their respective characteristics, the floodway must be kept clear of development while the floodway fringe may be developed according to specific regulations. In addition to local regulations and the Uniform Statewide Building Code, the Federal Emergency Management Agency (FEMA) has regulatory authority within the 100-year floodplain. The 500-year floodplain is not regulated.

Streams/Drainage

Fredericksburg's location along the Atlantic Seaboard fall line results in a varied topography. The City's elevation ranges between 280 feet above sea level at its highest reaches to less than 10 feet above sea level along the tidal portion of the Rappahannock River. The City's landscape is drained by a number of streams as well as by its historic canal system. These primary water channels carry stormwater and runoff to the Rappahannock River. Table 5-2 lists the City's significant watersheds.

Table 5-2. Fredericksburg's Watersheds.

Watershed	Percentage of City drained
Hazel Run, including Smith Run	49 percent
Kenmore Flume	11 percent
Fall Quarry Run	7 percent
Rappahannock Canal	8 percent
Deep Run	9 percent
Rappahannock River	16 percent

Drainage problems have occurred along Smith Run, from Interstate-95 and some of the early development north of Route 3. Inadequate stormwater management for impervious surfaces such as roadways, parking lots, and buildings have increased flows to the natural stream and caused streambank erosion and flooding. An 11-acre stormwater pond in Central Park, as well as the Smith Run Pond near the Great Oaks Subdivision have been designed to address these issues. As these areas continue to develop, however, new stormwater management practices and technical criteria will need to be incorporated to address runoff quantity and quality.

Similar erosion problems occur along Hazel Run. The increased runoff from developed land along Route 3, both east and west of Interstate-95 (including areas beyond the City limits) is not



Map 5-3. Streams/Drainage.

being properly addressed by outdated and inadequate stormwater facilities. As development and redevelopment continues within this watershed, the new stormwater management regulations will help to reduce the associated runoff and pollutants. Efforts such as stream restoration and bank stabilization will address these existing conditions.

Municipal Separate Storm Sewer System (MS4)

Polluted stormwater runoff impairs the quality of natural water bodies. Runoff flows over land and through storm sewers and is often discharged into local waterways before pollutants can be filtered out through natural processes. Uncontrolled, this water pollution destroys fish, wildlife, aquatic habitat, and water supplies. Discharges from municipal storm sewer systems are regulated under the Clean Water Act, the Virginia Stormwater Management Act, and the Virginia Stormwater Management Program. In compliance with the Virginia Stormwater Management Program, local governments are going to be required to address stormwater, through increasingly comprehensive regulations that will upgrade existing facilities and establish better designed new facilities.

Fredericksburg's Municipal Separate Storm Sewer System (MS4) is the system that collects and conveys stormwater that ultimately discharges into the Rappahannock River and its tributaries. The MS4 includes roads, drains, catch basins, curbs, gutters, ditches, man-made channels, and storm drains. Stormwater management has become increasingly effective in addressing both the volume and duration of stormwater, but stormwater management systems in older developments are often ineffective and even non-existent. The MS4 program is going to require the City to develop, implement, and enforce reductions in discharged pollutants, to satisfy established water quality requirements.

To achieve that end, the locality may need to build new stormwater facilities and/or retrofit existing stormwater management systems. The overall program must include the following minimum control measures:

- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Site Runoff Control
- Pollution Prevention and Good Housekeeping
- Public education and outreach
- Increased tree planting on both public and private land

Virginia Stormwater Management Program

Stormwater runoff is a natural process accommodated by a system of streams, rivers, and water bodies. On land in its natural state, rainwater is absorbed by trees, grasses, and wetlands – allowing pollutants to filter into the ground and reducing the flow of the water as it travels to stream systems. When land is disturbed and built upon, however, the rate of stormwater runoff inevitably increases. Pollutant levels can then exceed the ability of receiving streams and waterbodies to assimilate them and increased runoff can increase stream flow, which aggravates stream bank and channel erosion.

Stormwater management addresses both the quantity and quality of the excess runoff, to protect the land from erosion, flooding, and pollutants. State and local land development regulations ensure that runoff from a developed area does not exceed that which existed before development occurred. Similarly, the quality of the runoff must meet regulatory standards that reduce nitrogen, phosphorus, sediment and other pollutants in the runoff. Management techniques, known as best management practices, include creating holding areas on site to allow the additional water to filter into the ground and to allow pollutants to filter out as well.

Pollution control programs have been reasonably effective where there is a single point of discharge, such as a sewage treatment plants. These types of facilities can control the quality of the treated water that is put back into a water body. More difficult has been the effort to address pollution that is carried by stormwater runoff, which is not confined to a single source, and why it is called non-point source pollution. Currently inadequate facilities will need to be retrofitted to increase their efficiency, and new development, including redevelopment, will need to meet the new requirements. These efforts will allow the City to meet new regulatory standards of the MS4 Program for total impacts to waters of the United States.

In practice, many approved stormwater facilities have proved inadequate for achieving water quality goals and the Virginia Department of Environmental Quality has introduced new standards that must be followed by developers and enforced by Virginia localities. Stormwater leaving a developed site cannot exceed what would have flowed off site prior to development. It should be noted that the goals for managing stormwater have not changed. The intent has always been to control the quality and quantity of runoff. What has changed is the technical feasibility to actually achieve long held water quality standards and the City will be enforcing

the Commonwealth's new regulations, to ensure that runoff within the City does not exceed a total maximum daily load of pollutants (TMDL).

The TMDL is a comprehensive allowance that establishes a limit on pollutants such as nitrogen, phosphorus, sediment, and other pollutants of concern that a locality can allow to reach natural water bodies within its jurisdiction. The limit is part of a larger process to clean up the waters of local streams and rivers and eventually the Chesapeake Bay. The Chesapeake Bay TMDL has been designed to ensure that pollution control measures needed to restore the Bay are fully established by 2025, with at least 60 percent reduction completed by 2017, as outlined in the Commonwealth's Watershed Implementation Plan. The City is developing new administrative procedures to ensure stormwater facilities throughout Fredericksburg are identified, improved, and monitored according to the new regulations.

Woodlands/Tree Preservation

The City contains several areas of significant woodlands. The stream valleys at Smith and Hazel Runs consist of mature forest cover, including some trees older than 100 years. The wooded bluffs along the Rappahannock River also consist of mature cover as does the old Virginia Central Railway corridor. Many other areas of the City have a more modest level of tree cover, but the cumulative effect is substantial, with positive impacts to the community. Tree cover helps to improve water quality, conserve energy, lower city temperatures, reduce air pollution, enhance property values, provide wildlife habitat, facilitate social opportunities, and provide general aesthetic benefits. The City has worked with the Virginia Department of Forestry to evaluate its tree canopy.

The Urban Tree Canopy

In 2010, the Virginia Department of Forestry evaluated the urban tree canopy in the City of Fredericksburg. The overall canopy is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above (using high resolution aerial imagery). The protocols for such an assessment have been standardized by the U.S. Department of Agriculture. The data used had been developed in 2008.

The 2010 analysis showed that 2,979 acres of Fredericksburg is covered by tree canopy. This acreage corresponds to 44.4 percent of all land within the City. An additional 1,603 acres of the City could be improved to support additional urban tree canopy. This acreage constitutes 24 percent of City land and the areas with the strongest potential for possible tree canopy are

those areas zoned for residential development and certain commercial uses. The context for this study, though, was a substantial loss of tree cover due to development. According to a study by the George Washington Regional Commission, the City had lost nearly 28 percent of its tree canopy during the period 1996 through 2009.

In 2011, the City Council committed itself to maintain as well as increase the City's urban tree canopy by 5 percent over a period of ten years. This percent of increase sounds modest, but with the loss of trees to age and storm damage as well as to development, a five percent increase in the City's tree canopy will require that approximately 12,000 new trees be planted by 2021. With the City's support, the local non-profit organization called Tree Fredericksburg is well on its way to meeting this goal. In discussing the City's tree canopy, several citizens suggested the City adopt a no-net-loss of tree cover during the development process. This type of policy would help the City achieve its goal to maintain as well as increase its urban forest

Climate

The City of Fredericksburg enjoys a humid, temperate climate. The average monthly temperature varies from 35.4 degrees Fahrenheit in January to 76.9 degree Fahrenheit in July. The average annual rainfall is 38.4 inches and the average annual snowfall is 16 inches.

Rappahannock River

The Rappahannock River is a significant natural asset that the City recognizes and protects to the greatest extent possible. This river originates at a spring in the Blue Ridge Mountains and flows east, for 185 miles, to the Chesapeake Bay. To the west, this waterway is typical of the streams that course through the farmland of the Virginia Piedmont, while to the east the river flows quietly through the flatter Tidewater region. The middle section of the river, west of the fall line, has remained fairly primitive, primarily through ownership of its riparian lands by the City of Fredericksburg. These riparian woodlands also represent a significant wildlife habitat.

The City has recognized that the forested riparian lands along its river holdings provide substantial environmental benefits that protect the river's water quality, which is the City's primary source of drinking water. As a consequence, the City government has developed policies to protect the intact ecosystem in its natural state. In 1999, the City joined with Spotsylvania County to develop a regional water treatment plant at the Mott's Run Reservoir. This new facility made the dam (built in 1909) on the main stem of the river obsolete and the

City worked with the Friends of the Rappahannock and the U.S. Army Corps of Engineers to remove this last obstruction across the river. In 2004, the Corps breached the dam, which made the Rappahannock River a free-flowing waterway from the mountains to the Chesapeake Bay. Fredericksburg built on this environmental restoration project by placing a conservation easement over 4,232 acres of forested riparian lands it owns in five upriver jurisdictions.

A portion of the Rappahannock River is also designated as a State Scenic River, from its headwaters to Fredericksburg's Mayfield Bridge. Its major tributary, the Rapidan River, has been evaluated for similar designation and that waterway, from the Germanna Bridge (State Route 3) to its confluence with the Rappahannock River, would qualify for similar designation. In addition, the stretch of river from the Mayfield Bridge to the Chesapeake Bay has a strong potential for scenic river status. The Captain John Smith Chesapeake National Historic Trail extends up this tidal section of the Rappahannock River to Fredericksburg, which is the farthest west that Captain Smith was able to reach during his explorations in 1608.

Identified challenges related to the Rappahannock River's water quality include siltation and nutrient loading from development as well as agriculture in the upriver watershed. The specific issues related the river and its many tributaries include contamination from *Escherichia coli*, low pH, fish contaminated with PCB, and dissolved oxygen. The City's upriver watershed policies seek to curtail erosion on City lands and new federal and state environmental regulations for stormwater are going into effect, which will further assist in this reduction of pollutants.

Wetlands

Wetlands are transitional lands between terrestrial and aquatic ecosystems. These areas provide critical habitat for fish and wildlife, assist in stormwater management, and help protect water quality by absorbing and filtering sediments and pollutants. Because plants and soils provide a readily measured record of a site's hydrology, wetlands are defined, for regulatory purposes, as areas that have one or more of the following characteristics:

1. The land predominantly supports, at least periodically, plants that grow in water or extremely moist ground.
2. The substrate is predominantly undrained hydric soil.
3. The substrate is saturated with water or covered by shallow water at some time during the growing season of each year.

Wetlands are further classified as tidal or non-tidal. Tidal wetlands are found between, and contiguous to, mean low water and an elevation above mean low water equal to a factor 1.5 times the mean tide range. These wetlands can be either vegetated or non-vegetated. Non-tidal wetlands are those areas that contain wet soils, plants adapted to growing in such areas, or that show evidence of water on or immediately below the land surface during the growing season.

The following specific sites are known wetlands within the City. A wetlands zoning ordinance regulates land use and development within these areas, as well as any other areas that may be identified as wetlands:

- Rappahannock River shoreline
- Hazel Run and its tributaries
- Smith Run/Falling Creek
- Fall Quarry Run
- Deep Run tributary
- Rappahannock Canal
- Gayles Pond/College Marsh
- Snowden Pond and adjacent marshes
- Old Mill Park marshlands/mill race areas
- Twin Lakes and other lakes/ponds
- Canterbury Subdivision wetlands
- Scotts Island
- Other isolated non-tidal wetlands
- Other intermittent streams

Chesapeake Bay Preservation Areas

In 1988, the Commonwealth of Virginia enacted the Chesapeake Bay Preservation Act to ensure proper land use management at the jurisdictional level, with the intent to improve the quality of water entering the Bay. The City identified Chesapeake Bay Preservation Areas within the City limits and incorporated measures to protect water quality in its zoning, subdivision, and erosion and sediment control ordinances (see Map 5-3).

The State water quality program has the following objectives:

- Protect existing high quality State waters and restore all other State waters to a condition or quality that will permit all reasonable public uses and will support the propagation and growth of all aquatic life, including game and fish, which might reasonably be expected to inhabit them.
- Safeguard the clean waters of the Commonwealth from pollution.
- Prevent any increase in pollution.
- Reduce existing pollution.
- Promote water resource conservation to provide for the health, safety, and welfare of the present and future citizens of the Commonwealth.

The Chesapeake Bay Protection Areas are classified as Resource Protection Areas (RPAs) or Resource Management Areas (RMAs). These areas have been identified and mapped according to natural terrain features.

Resource Protection Areas

Resource Protection Areas (RPAs) are those lands which have an intrinsic water quality value. In their natural condition, these lands remove, reduce, or assimilate sediments, nutrients, and potentially harmful or toxic substances in runoff entering the waterway. Such areas include tributary streams, tidal shorelines, tidal wetlands, and certain non-tidal wetlands. These RPAs are sensitive to significant degradation and must include a buffer of at least 100 feet in which development is largely prohibited.

Tributary Streams – The City has designated the Rappahannock River and Hazel Run as tributary streams, to serve as the base line for RPAs within the City limits. These perennial streams are regulated by the State Water Control Board. Adjacent lands which could influence water quality, if disturbed, are regulated by the City as RPAs and/or RMAs.

Tidal Shoreline – The City's designated tidal shorelines have been identified from Deep Run to the area above Scott's Island (using the National Oceanic and Atmospheric Administration's Nautical Chart 12237). From Scott's Island to the fall line, wetlands have been identified using the National Wetlands Inventory Map (Fredericksburg Quadrangle). The City seeks to avoid disturbing these tidal shorelines, but will consider water-dependent activities and shoreline stabilization permitted by State regulations.

Tidal Wetlands Overlay – The City has slightly more than four miles of tidal shoreline, but only about ¼ acre of vegetated tidal wetlands. The preferred land use is avoidance, but if avoidance is not possible then steps need to be taken to minimize all potential impacts.

Non-Tidal Wetlands Overlay – Non-tidal wetlands are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation adapted for life in saturated soils. Two areas of non-tidal wetlands met the criteria to be included as RPAs. The first non-tidal wetland is Back Marsh, to the west of Snowden Pond. The second is located at Old Mill Park, between the park entrance and the power lines. Due to their characteristic hydrology, these areas are useful as protected features that contribute to overall water quality protection.

RPA Buffer – Chesapeake Bay regulations specify at least a 100-foot buffer adjacent to and landward of any of the above-designated RPA components. This buffer becomes part of the RPA and must be further protected by an adjoining Resource Management Area (RMA).

Resource Management Areas

If improperly developed, RMAs have the potential to significantly diminish the functional value of an RPA. The lands designated as RMAs in the City are those areas sensitive to any disturbance, especially the removal of natural vegetation. Those areas include floodplains, highly permeable soils, highly erodible soils and steep slopes, and certain other non-tidal wetlands. Development is not prohibited in an RMA, but does require cautious development practices.

Floodplain – The City's Floodplain Overlay District protects those areas of the City subject to periodic inundation due to floods. Development in the floodway is largely prohibited, to avoid increasing flood heights and restricting the passage of flood water. Development within the floodway fringe is allowed as long as it will not adversely impact the environment or cause a hazard to human safety, as controlled through Building Codes and other applicable regulations.

Portions of the downtown floodplain were built upon before flood hazards were fully understood and the City works to maintain significant historic buildings in those areas while also pursuing appropriate redevelopment that avoids the creation of flood hazards. The City-owned lands in the upriver watershed remain in their natural state. These intact floodplains are unobstructed and effectively diffuse flood waters.

Highly Permeable Soils – Soils transmit water both vertically and horizontally, the water eventually entering the water table and/or a waterway. Highly permeable soils allow water to enter the water table and/or surface waters before proper natural water treatment has occurred. Most of the City’s highly permeable soils are found west of Interstate-95, near the Rappahannock River.

Highly Erodible Soils and Steep Slopes – The susceptibility of soils to water erosion, both from rainfall and runoff, is a combination slope length and steepness and the soil loss tolerance. Identified areas of highly erodible soils and steep slopes that are adjacent to or contiguous to an existing RPA were included in the RMA designation.

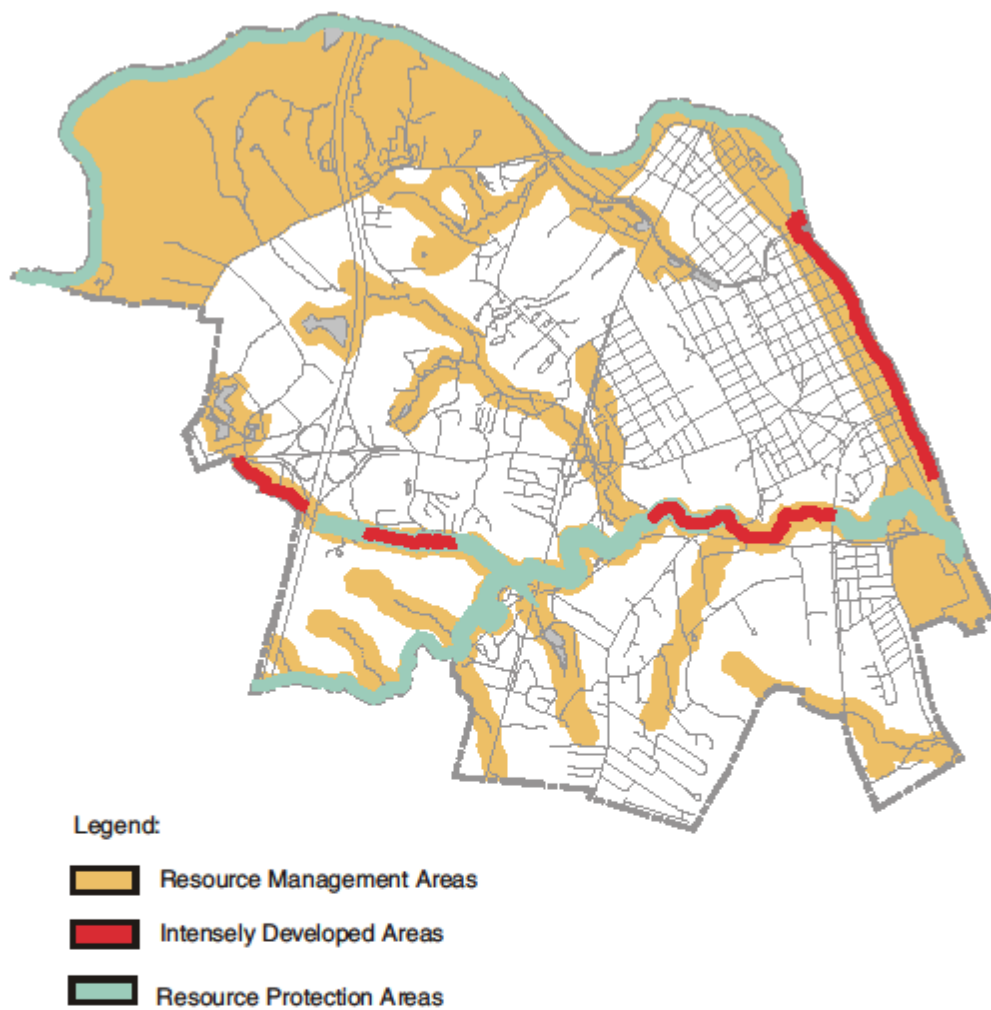
RMA Non-Tidal Wetlands – Although wetlands on or contiguous to perennial streams are identified as RPAs, isolated wetlands or those on intermittent streams also play a role in water quality protection. The City has identified certain wetlands as RMA features, to address the cumulative impact associated with the loss of non-tidal wetlands.

Intensely Developed Areas

Designation of some lands as Intensely Developed Areas (IDAs) recognizes that there are areas with little natural environment remaining within what would otherwise be designated preservation areas. In these instances, development and redevelopment that complies with the performance criteria of the Chesapeake Bay Preservation Overlay District is permitted. The City has identified several IDAs. The first is the section of the Rappahannock River RPA that extends from the Falmouth Bridge to the City Dock (with the exception of existing waterfront parks). The second IDA is the Hazel Run RPA that courses through the industrial park. The third and fourth IDAs are on North Hazel Run, behind existing commercial and residential development. The IDA designation allows redevelopment to continue, but within guidelines that encourage reduction of impervious areas and reestablishment of the RPA.

The Regional Green Infrastructure Plan

The George Washington Region (Planning District 16) has experienced a rapid population growth for almost two decades. The cumulative result of hundreds of development actions has led to a development pattern that has fragmented valuable forests and open space. To address this negative trend, the George Washington Regional Commission developed a plan to



Map 5-4. Chesapeake Bay Protection Areas.

strategically conserve green infrastructure assets, such as commercial and non-commercial forests, waterways, wildlife areas, wetlands, historic landscapes, working farms, vineyards and pasture, and public parks.

Within this regional document (Regional Green Infrastructure Plan, 2011) are specific plans for each member locality. The City of Fredericksburg has developed the following programs and is actively implementing them:

- MS4 Program for enhanced stormwater management
- Continued compliance with the Chesapeake Bay Preservation Act
- Low Impact Development Ordinance, to achieve the following stormwater management goals:
 - Limit the rate of stormwater runoff from developed areas to that which existed before development occurred.
 - Reduce the runoff flow within the Hazel Run, Rappahannock Canal, Kenmore Flume, and Deep Run watersheds during new development and re-development.
 - Drain new or re-developed parking lots outside the Hazel Run, Rappahannock Canal, Kenmore Flume, and Deep Run watersheds so at least 50 percent of the lot drains to a filtration practice that treats the first one half inch of runoff.
- Other specified environmental programs.

Open Space/Greenways

Fredericksburg encompasses significant natural resource areas, such as stream valleys, various wetlands, and mature woodlands. As noted in the Regional Green Infrastructure Plan, development can fragment these natural assets, which diminishes their effectiveness. The concept of green infrastructure is to provide an interconnected network of natural areas and open space, managed to conserve their natural ecosystem functions.

Fredericksburg's green infrastructure includes the following components:

- Conservation of the City's upriver riparian lands
- Public ownership of riparian lands within the City limits
- Parks and greenways
 - City parks identified in Table 4-5
 - City trails identified in Table 3-1
- Urban reforestation (noted above under Woodlands/Tree Preservation)

- Protection of wetlands and floodplains
- An improved stormwater management network
 - MS4
 - Chesapeake Bay program

The Climate, Environment & Readiness (CLEAR) Plan

In 2012, the University of Mary Washington initiated a planning process to examine the region's ability to adapt to changing weather patterns as well as its ability to recover from natural disasters. While changing weather patterns are bringing more snow, more severe storms, more flooding, and more droughts, it is also the region's natural infrastructure that has been critical to helping the region absorb disasters and then recover from them. Floodplains, for example, help to absorb flooding and storm surges. Not all disasters arrive swiftly, though. A changing climate imposes a slowly developing threat, and natural systems are still critical to maintaining a healthy population and a healthy economy. Trees and other vegetation, for instance, help to purify air and water, so protecting them and planting more have multiple benefits.

The CLEAR Report distilled preparations for weather change and natural disasters to the following broad items:

- Climate
 - Resilience – develop sustainable communities and cooperate to build a sustainable region
 - Emissions and Mobility – reduce the need for driving, which in turn will reduce emissions
- Environment
 - Soil and Water – conserve water and anticipate threats to the water supply, such as fracking
 - River, Open Space, and Culture – protect the river, open space, and historic and cultural resources
 - Waste – reduce solid waste, through composting and recycling
- Readiness
 - Emergency preparedness – develop emergency response plans that are comprehensive and coordinated
 - Economic development – ensure the regional economy is environmentally sustainable

Remediation of Brownfields

Fredericksburg is a community that has experienced human activity for nearly three centuries. Historic land uses have included weapons manufacturing, iron forges, water powered mills, and factories. Some of these places may have some level of contamination (copper, lead, zinc, mercury, etc.) and the City has worked diligently with property owners and investors to ensure that any contaminants are identified and remediated before development or redevelopment occurs. The term brownfield refers to an industrial site that may be contaminated. Once cleaned up, though, such a site can be redeveloped.

Some of the older brownfield sites are within the historic areas of the City, while certain entryway corridors have older service stations that might have issues with petroleum hydrocarbons. Table 5-3 shows the areas targeted for the use of available public funding to identify possible contaminants. Remediation of sites confirmed to be brownfields helps to remove known health hazards and return the land to productive use.

Table 5-3. Potential brownfield areas.

Site/Area of Concern	Anticipated Contaminants
Downtown	Metals, Semivolatile Organic Compounds (SVOCs), Volatile Organic Compounds (VOCs)
Entryway corridors	Petroleum, Solvents, Polycyclic Aromatic Hydrocarbons (PAHs)
Battlefield Industrial Park	Metals, Hydrochloric Acid, Solvents, polychlorinated biphenyls (PCBs)
Industrial area near Hazel Run	Petroleum, Creosote

Other Environmental Hazards

Several petroleum pipelines run through the upriver watershed from which Fredericksburg obtains its water supply. Pipeline ruptures caused immediate problems when Fredericksburg had an in-stream reservoir. All water supply reservoirs have since been established on tributaries, but the following pipelines still cross the Rappahannock River upstream of the water intakes at Hunting Run, Motts Run, and Rocky Pen Run:

- The Colonial pipeline consists of two parallel lines, 32 and 36 inches in diameter, running 1,196 miles from Texas to New York. They have a capacity to move up to 2.5 million gallons of petroleum product per day. The pipeline passes through the Mine Run watershed, where two breaks have occurred. They also cross beneath the Rapidan River, Mountain Run, and the Rappahannock River.
- A Columbia Gas pipeline carries natural gas beneath the Hazel and the Rappahannock Rivers.
- The Transcontinental Gas line also runs from Texas to New York, crossing beneath Mountain Run and the Rappahannock River.
- The Commonwealth Gas pipeline runs between Culpeper County and Fredericksburg, through Orange and Spotsylvania Counties. The pipeline runs beneath the Rapidan River, LaRoque Run, and Motts Run.
- Another pipeline carrying fuel from Texas to New York passes under the Rappahannock River at Fredericksburg, under the railway bridge.

The rail line through Fredericksburg also carries hazardous materials and some materials are routed near the Mayfield neighborhood.

Environmental Protection Goals

Goal 1: Resource Protection

Ensure that growth and development does not compromise the function of natural ecosystems, by establishing and updating land use policies that identify and manage the cumulative impacts of individual development projects.

Goal 2: Watersheds

Protect the ecological integrity of the Rappahannock River watershed from inappropriate development, in order to ensure the highest water quality and to preserve natural resources for the benefit of present and future generations.

Goal 3: Natural Functions of Rivers and Streams

Maintain the ecological integrity of the Rappahannock River and its tributaries for their biological functions and wildlife habitat, as well as for drainage, recreational uses, and other purposes.

Goal 4: Water Quality

Improve water quality through implementation of best management practices for stormwater management, erosion and sediment control, and wastewater treatment that meet or exceed the Commonwealth of Virginia's regulatory requirements.

Goal 5: Sustainability

Strengthen existing policies and develop new ones to actively promote a sustainable future.

Goal 6: Livability

Strengthen existing policies and develop new ones to actively promote a sustainable future by promoting clustered and compact development, which would be balanced by additional open space, and redevelopment of land repurposing of structures.

Goal 7: Sustainability Leadership

Expand the role of the City's Clean and Green Commission to develop sustainability/livability policy recommendations.

Goal 8: City Leadership

The City should set the example in creating a more sustainable society.

Environmental Protection Policies

The following key policy statements will guide protection of the City's environmentally sensitive lands:

1. Preserve and protect the Rappahannock River watershed by controlling stormwater, non-point source pollution, and streambank erosion.
2. Address sediment loads in the river at their source, through upstream initiatives.
3. Encourage low impact development by restricting unnecessary grading and clearing of natural vegetation and incorporating natural features in site design.
4. Minimize tree loss as development and redevelopment occurs in the City.
5. Improve stormwater, wastewater, and erosion and sediment control systems.
6. Maintain natural floodplains intact, such as Butzner Flats and Old Mill Park.
7. Protect wooded riparian buffers along the City's waterways.
8. Retrofit existing stormwater management systems, so the City can remain below its total maximum daily allowance for pollutants entering the Rappahannock River.
9. Actively pursue site-level water conservation measures.
10. Develop an interconnected system of natural areas (open spaces, wildlife habitats, environmentally sensitive lands, vistas, etc.) that can be connected by pathways.
11. Promote eco-tourism that balances resource protection with recreational uses.
12. Reduce light pollution by continued attention to lighting standards during development and re-development and by adopting Dark Sky standards.
13. Actively pursue reduction of the City's carbon footprint by lowering energy consumption, promoting recycling, and developing incentives for other measures that will enhance the City's environmental and economic resilience.

Environmental Protection Initiatives

These initiatives outline key steps for implementing the long-term goals and guiding policies for protecting environmental resources:

1. Continue to update and strengthen development regulations related to water quality and use of sensitive lands.
2. Expand tree planting initiatives in neighborhoods, within road corridors, and in City parks.
3. Pursue a program that will result in no net loss of tree canopy, by ensuring provision of an equivalent tree canopy (either on-site or elsewhere in the City) when trees are removed for new development and redevelopment.
4. Continue to implement the Fredericksburg Watershed Property Maintenance Plan that protects the City's upriver lands, with emphasis on tree protection, halting

encroachments, minimizing non-point source pollution, preserving historic resources, and identifying key additional land parcels for acquisition.

5. Develop enhanced stormwater management and erosion and sediment control regulations, to be consistent with new requirements promulgated by the Commonwealth of Virginia.
6. Continue to inventory existing stormwater outfalls, in order to improve them so they do not cause erosion or result in other environmental degradation.
7. Establish a street tree inventory, to assist in developing a tree plan and to provide a basis for appropriate maintenance of street trees.
8. Continue to protect scenic areas and vistas on upriver riparian lands, by avoiding signs and other visible intrusions.
9. Reduce adverse recreational impacts in the upriver watershed by closely monitoring access areas for erosion, vegetation destruction, and accumulations of trash.
10. Reduce the volume of solid waste placed in landfills through the continued expansion and improvement of recycling programs.
11. Actively pursue measures to protect the public in the vicinity of potentially hazardous facilities such as pipelines, railways, storage areas, etc.
12. Actively pursue implementation of the regional Climate, Environmental & Readiness (CLEAR) plan, developed by the George Washington Regional Commission.
13. Expand the duties of the Clean & Green Commission to include responsibility for evaluating existing sustainability policies and recommending coordinated new ones.

Chapter 6:

Business Opportunities

Background

Fredericksburg's businesses tend to be focused in four types of geographic areas – in the traditional central business district that is downtown Fredericksburg, along various commercial corridors including State Route 3 and U.S. Route 1, in business opportunity districts outside of the traditional central business district, and in the City/Battlefield Industrial Park. Central Park is one of the region's largest retail centers and Celebrate Virginia South has been designated as a tourism-focused development. There are also a few small businesses at intersections within residential neighborhoods. These latter locations are remnants of historic development patterns that remain viable today.

Downtown

Preserving the mixed-use character of downtown Fredericksburg is critically important to the continued economic health of the community. The central business district has always been home to commercial, residential, office, and institutional uses – comprising a mix of interrelated activities necessary for sustaining a viable urban center. This downtown community functions within a traditional street grid that effectively diffuses modern traffic, while maintaining a pedestrian scale. The continued preservation of downtown Fredericksburg's distinctive character is a cornerstone of this Comprehensive Plan.

Workplace of the Future

Placemaking is an emerging economic strategy, evident through a trend measured over the past 20 years that reveals job growth in downtowns nationwide. Places like Fredericksburg already have a strong downtown community and the concept is to maintain and enhance that community identity to attract an educated and employable work force. The young demographic beginning to build careers is drawn to accessible, active, and attractive communities and employers seeking to hire this talent have begun to base relocation decisions on how they can obtain these desirable workers.

For the City to take advantage of an economic trend that emphasizes placemaking, it is important to recognize that preservation of downtown buildings is only part of the required effort. A highly-functional street grid has kept downtown Fredericksburg physically cohesive and appropriate zoning regulations, including modified parking requirements, have been critical to keeping downtown economically viable. Downtown Fredericksburg will thrive as long as those who would like to establish businesses there can do so without being held to development standards that are unattainable in a historic urban setting. The City has encouraged numerous mixed-use projects in its downtown and a high level of investment will close the loop and lead to corresponding investments toward historic preservation.

Placemaking is clearly related to public policies that enhance a good quality of life. The American Association of Retired Persons (AARP) has even developed what they call a livability index, measuring such things as a community's housing opportunities, its neighborhood cohesiveness, the accessibility of its transportation system, the overall environment, availability of health facilities, the extent of civic involvement, and so on. Those factors important to an aging generations seeking to age in place are also important to attracting an employable work force. The City's quality of life policies – including those related to neighborhood design, provision of an interconnected multi-modal transportation system, Historic District preservation, supporting a cohesive school system, and maintaining significant amounts of parkland and open space – relate to building an attractive community that meets social as well as economic development needs.

Building on Success

Fredericksburg's Economic Development Authority has recognized Fredericksburg's downtown area as the City's ongoing economic development opportunity. The EDA has a façade improvement program and a JumpStart! grants program, both of which are designed to assist with downtown development. The City and the EDA recognize that a sustainable economic development policy needs to include small redevelopment efforts as well as large new projects. The City has also included downtown in both its Tourism and Technology Zone incentive program, allowing qualifying businesses to take advantage of tax incentives. Downtown's strengths and opportunities for continued investment can be summarized as follows.

Strengths

- Independent businesses
- Well preserved historic setting
- Riverfront

- Railway station functions as a multimodal hub and a gateway
- Mix of uses (attention to zoning has provided for both commercial and residential development)
- Pedestrian friendly environment (sidewalks, trails, street grid, safe crosswalks)
- Active arts community
- Special events occur year round
- Newly established Main Street program
- Government buildings and functions have been kept downtown
- Parks

Challenges/Opportunities

- Inadequate mix of business types
- Vacant storefronts
- Deferred maintenance (demolition by neglect)
- Perception of a parking problem (availability as well as inadequate time limits)
- Underused/open sites (infill opportunities)
- Some businesses not motivated to extend hours to evenings and holidays
- Post Office is considering moving to a larger site
- Gateways to downtown need to impart a sense of arrival

A competitive commercial mix is necessary for downtown success, but is difficult to achieve with every storefront independently owned/operated. Efforts need to focus on expanding commercial activity at existing enterprises as well as developing a viable diversity of businesses that will fill vacant storefronts. One of the constraints to achieving this objective is the dominance of large-scale outlying commercial areas such as Central Park. As a consequence, regulatory statutes related to parking and re-development need to be reviewed very carefully, to ensure they promote and encourage, rather than hinder downtown revitalization.

Downtown Fredericksburg should also be the focal point of an expanded tourism program. One of the challenges of tourism is to provide various experiences so a visitor has reason to stay longer as well as return for additional visits. Another challenge is to recognize the carrying capacity of the visitor destination so visitation does not compromise the character of the community. In effect, tourism should benefit both the visitors who seek to experience a place as well as the host community. The City's tourism efforts have consistently sought to add to visitor options and have also worked to encourage special events and large group visitation.

Government functions are a key component of downtown and it is important to keep such activity within the urban core. As an example, the new court house has been constructed downtown, even though a larger site would have been easier to develop. Similarly, the U.S. Post Office on Princess Anne Street includes a regional distribution facility that has outgrown its site. When this distribution function is moved elsewhere, it will be important to ensure that the Postal Service retains an operating post office in downtown Fredericksburg. There will be opportunities for mixed-use development on the Post Office site once this occurs.

Fredericksburg VA Main Street, Inc.

In 2010, the Economic Development Authority initiated an effort to bring a Main Street program to Fredericksburg. Main Street is a preservation based economic and community development program developed by the National Trust for Historic Preservation and implemented in this state by the Virginia Department of Housing and Community Development. The program has found success by using a comprehensive strategy tailored to local needs and opportunities in four broad areas, as follows:

- **Design** – Enhancing the physical appearance of the commercial district by rehabilitating historic buildings, supporting new construction, developing sensitive design management, beautification, and long term planning.
- **Organization** – Building consensus and cooperation among groups and individuals who have a role in the revitalization process.
- **Promotion** – Marketing the commercial district’s unique characteristics to customers, investors, local citizens, and visitors.
- **Economic Restructuring** – Strengthening the existing economic base, while expanding it to meet new opportunities and challenges.

Fredericksburg became a Main Street community in 2013 and Fredericksburg VA Main Street, Inc. has adopted the mission to preserve and enhance historic Fredericksburg’s diverse and vibrant downtown community by pooling resources, ideas, and experiences to make Fredericksburg a better place to live, work, and play. This organization’s vision is that 300 years of history can be blended into contemporary life.

Tourism

The City’s wealth of historic resources has drawn visitors from all over the world. The City’s visitor center provides a great variety of visitor information and specialized services. A growing

network of bicycle/foot trails is also providing an opportunity for additional interpretation of sites, not otherwise accessible, for visitors and residents. The Fredericksburg and Spotsylvania National Military Park, established in 1927, currently has two visitor centers, one on the Fredericksburg battlefield and another at Chancellorsville, ten miles west of the City. These battlefields have national significance and the economic impact of the visitors drawn to them is measured in millions of dollars annually.

The National Park Service has discussed the potential for additional battlefield visitor centers at the Wilderness and Spotsylvania Court House. All of the National Park's existing or proposed visitor centers, however, are far removed from the main transportation corridor of Interstate-95. Some of the local non-profit organizations have discussed the potential for a regional visitor center established nearer the interstate, potentially in Celebrate Virginia. This facility could be a partnership effort, as has occurred at the Gettysburg National Military Park, but no related discussions have been initiated with the National Park Service.

Corridors

Fredericksburg is defined geographically by distinct, identifiable areas of activity, connected by a network of transportation corridors. In addition to moving traffic, these corridors also represent a range of economic opportunities. Redevelopment along these routes, with an emphasis on mixed-uses and appearance, will help the City to achieve its economic development goals. The various corridors have differing levels of intensity, due primarily to their transportation function, which affects their respective redevelopment potential. Zoning is an important factor in attracting business development, but the available infrastructure is often a stronger determinant of commercial activity.

Major Corridors That Pass Through the City

A north-south and an east-west highway intersect in Fredericksburg. Each carries heavy volumes of traffic that pass through the City although much of the traffic is also local. There are several places along these major corridors that are suitable for a more intense development than currently exists.

U.S. Route 1 Bypass (Jefferson Davis Highway) - This corridor extends from the Rappahannock River to the south city limit, but its greatest long term development potential is in its northern section, between the river and State Route 3. There are several older shopping centers in this corridor that could be redeveloped as mixed use centers, scaled to blend with the adjoining residential areas. The University of Mary Washington and its foundation have played a major

role in redeveloping this section of the City. The UMW Foundation's Eagle Village has transformed an older retail center into a thriving mixed-use complex that includes a hotel, student housing, offices, new restaurants, a children's museum, and other retail businesses. An attractive pedestrian bridge over the U.S. Route 1 Bypass connects Eagle Village with UMW's main campus, where ample construction related to the University continues to occur. The UMW Foundation will continue its redevelopment of Eagle Village in the years to come. Cowan Crossings is another example of a newer retail-focused development in the U.S. Route 1 Bypass corridor.

The extension of Mary Washington Boulevard to Fall Hill Avenue will improve access between the U.S. Route 1 Bypass corridor and Central Park/Celebrate Virginia, which could create additional interest in redeveloping other commercial centers. Most of the City's schools are also located along this corridor.

State Route 3 (Blue and Gray Parkway) - From east to west, this route extends from the Rappahannock River to Central Park Boulevard. The development potential is primarily in its western section, between Central Park Boulevard and Woodlyn Drive. That stretch of road includes several older retail and office developments that could, over time, see additional interest from developers. Redevelopment of under-used commercial properties in each of the four quadrants of the Interstate-95/State Route 3 interchange provides significant opportunities to expand the City's tax base.

The Hylton Group plans a large mixed-use development that would extend from the intersection of Gateway Boulevard to Cowan Boulevard. This land fronts Interstate-95 and is one of the City's largest remaining undeveloped properties east of the interstate.

There have also been suggestions of redeveloping the corridor between Dixon Street and Lafayette Boulevard from industrial to commercial, including tracts along the northern edge of the Battlefield Industrial Park. The recently approved Telegraph Hill development, near the intersection of the Blue and Gray Parkway and Lafayette Boulevard, will include new homes, offices, and retail uses. The City/Battlefield Industrial Park itself, however, would be difficult to redevelop as anything other than industrial, due to the existing road network that is too limiting for intensive commercial or mixed uses.

Development Corridors

Some corridors were created to open land to development. These roads provide new connections to existing ones, but are not suitable for the same level of development that will occur on through-highways.

Cowan Boulevard - This road connects the Jefferson Davis Highway with Central Park, crossing over Interstate-95, which is a substantial barrier to east-west travel in the City. It is primarily a residential corridor, with some medical offices due to its proximity to Mary Washington Hospital. There is also more land available for that type of development to continue. Cowan Crossings is an example of retail-focused development that has sprung up due to the road's strategic location. The area adjacent to Interstate-95 also has commercial development potential, primarily with the Hylton Group's planned project between Cowan Boulevard and State Route 3, on the east side of the interstate. This corridor also includes the institutional uses of Hugh Mercer Elementary School and the Fredericksburg Police Department.

Fall Hill Avenue - This road historically connected Fredericksburg with upriver mills and mines. At one point, it would have been classified as an entryway corridor to the City's urban core, but the U.S. Route 1 Bypass (Jefferson Davis Highway) changed the City's development patterns. A section of Fall Hill is now a one-way road, as traffic moves away from downtown. Further, a project to improve Fall Hill Avenue from a two-lane road to a four-lane divided road will end at the Rappahannock Canal, where it will intersect with a new four-lane road (Mary Washington Boulevard) in order to connect to the U.S. Route 1 Bypass (Jefferson Davis Highway).

East of the interstate, Fall Hill Avenue will remain a wooded roadway with very limited development potential. There is a medical complex that can expand and there are several apartment complexes, but most new development will be limited to residential uses. West of Interstate-95, Fall Hill Avenue is being more intensely developed. That stretch of roadway leads into Celebrate Virginia, where the successful Wegman's grocery store, an expo center, and new hotels are located and additional sites are ready for development. There are additional large parcels across Fall Hill Avenue from Celebrate Virginia that will also be intensely developed.

Future Development Corridors

A new road will be built, east of Interstate-95, extending Gateway Boulevard from State Route 3 to Fall Hill Avenue. The land between Route 3 and Cowan Boulevard is an undeveloped tract owned by the Hylton Group that is planned for mixed use development. The section between Cowan Boulevard and Fall Hill Avenue is already developing as residential neighborhoods. This road is not programmed for public funding, but will be privately developed.

Entryway Corridors

Roads that carry traffic from major roadways to downtown Fredericksburg function as entryway corridors. These routes provide a transition from heavily traveled roadways, with the intent to provide a sense of arrival to the historic urban core.

Princess Anne Street - This corridor includes post-World War II commercial buildings at its northern end, an industrial section between Pelham and Herndon Streets, and a mix of residential and commercial buildings as this route extends in to the Historic District. The areas identified for increased levels of development occur between the U.S. Route 1 Bypass (Jefferson Davis Highway) and Fauquier Street. Of special interest within this corridor is the area called the Mill District, which is an area with large industrial structures and connections to the Rappahannock River. There are substantial opportunities for adaptive reuse of the historic buildings as well as for new construction on nearby vacant land. There are also opportunities within this corridor for smaller infill projects and recruitment of HUBZone businesses, restaurants, and outdoor-focused enterprises that can take advantage of the new Rappahannock River Heritage Trail. The Economic Development Authority offers façade improvement grants for properties along this corridor.

William Street - William Street is a through-corridor designated as State Route 3. The Blue and Gray Parkway is the Route 3 Bypass. As an entryway corridor, William Street starts at the Blue and Gray Parkway and extends to the Rappahannock River. The redevelopment potential for mixed uses is a very short section, from Washington Avenue to Prince Edward Street. Amelia Square, Liberty Place, and Parkview are examples of some of the newer mixed-use projects planned along this corridor. There are additional redevelopment opportunities for the large parcels owned by the Free Lance-Star Publishing Company, which now runs its operations at the Print Innovators, on Belman Road. The stretch of William Street between Prince Edward Street and the River has developed as a lively destination for dining and other nighttime outings. The approach from the east is across the Chatham Bridge, which is an awkward gateway because William Street is one-way, which forces traffic entering the City to immediately turn either right or left.

Lafayette Boulevard - Lafayette Boulevard is the U.S. Route 1 Business Route and characterized by mid-twentieth century dwellings at its southern end, the wooded area at the entrance to Lee Drive within the Fredericksburg and Spotsylvania National Military Park, industrial buildings near the Blue and Gray Parkway, and early twentieth century houses and commercial buildings as the road enters into downtown. Much of this route consists of residential subdivisions, with a scattering of commercial activities. Eventually, this road will be improved to a four-lane divided facility, which will maintain the neighborhoods intact, but require the removal of many houses that are close to the road and thus within what will become the new right-of-way.

Redevelopment potential is limited to the section between Lee Drive (the entryway to the National Park) and Sophia Street. Within this corridor, the Virginia Central Railway Trail offers a safe bicycle/pedestrian link between downtown Fredericksburg and areas of the City west of

the U.S. Route 1 Bypass. The trail also provides an outdoor amenity for residents of the adjacent Cobblestone Square. The planned mixed-use Telegraph Hill community will also add to the Lafayette Boulevard dynamic on the south side of the Blue and Gray Parkway. The Economic Development Authority offers façade improvement grants for properties along this corridor. The railway station and the Rappahannock River at the northern end of this corridor also create opportunities for future mixed-use development.

Dixon Street - This road is a four-lane divided road (State Route 2/17) within the city limits, but becomes a two-lane road when it courses into Spotsylvania County. A significant amount of traffic uses this route, which intersects with the Blue and Gray Parkway. There are numerous established residential developments in this area along with the large recreational area known as Dixon Park. The area suitable for continued commercial development is the section between Beulah Salisbury Drive and Lansdowne Road.

Urban Riverfront Corridor

The Sophia Street corridor, from the City Dock to Fauquier Street has received attention for several decades as a potential riverfront park. These plans have been amended many times as development has occurred. At present, a riverfront park is being designed for 3 acres of City-owned land between Hanover and Wolfe Streets. The concept for the road corridor is to encourage development on the west side of the street, while leaving the east side open. In addition, traffic calming measures are proposed to be established at the intersection of Sophia and Charlotte Streets, and perhaps at other intersections, as needed.

Corridor Opportunities

The challenges in each of these corridors vary, but the consistent emphasis is on improving the roadways themselves as well as providing the appropriate development opportunities through City policies and regulation.

Corridor design guidelines have been developed for Princess Anne Street and Lafayette Boulevard. Similar efforts are needed for other corridors, both to encourage and promote redevelopment as well as to implement improvements that establish a sense of arrival.

Non-Conforming Signs - Signs should complement their location, whether mounted on a building or standing alone. Non-conforming off-premise signs (billboards) are not consistent with the City's goal to enhance its overall appearance. At present, there are approximately 25 billboards throughout the City and long range plans are to see their eventual removal.

Business Opportunity Districts

Modern development gravitates toward transportation corridors, but business opportunities are also concentrated in centralized locations to create a stronger economic dynamic (as has been done in urban centers for centuries). Central Park serves as both a local and regional shopping area and is a major economic resource. The Celebrate Virginia campus has been planned as a retail and hotel/conference center, to include environmental education and entertainment services and venues. To remain economically viable, these areas will need to address the challenges in business opportunity districts such as the changing dynamic of the retail industry amid a shift to online shopping. The City encourages the progression of these areas to the next level of intensity that includes a more urban mix of uses and promotes high-quality development and redevelopment that is sustainable and attractive within these business opportunity districts.

City/Battlefield Industrial Park

The City/Battlefield Industrial Park is a 300-acre area south of Hazel Run and west of the main north-south railway line (CSX Corporation). The industrial area evolved in this location when the Virginia Central Railway (VCR) provided a rail link between industrial activities on the outskirts of town and the main railway line in downtown Fredericksburg. The VCR is no longer in operation and its tracks have been removed or abandoned, so access to the industrial park is currently achieved from the Blue and Gray Parkway (State Route 3 Bypass).

A sizable part of the industrial park remains in agricultural use, but can be redeveloped whenever that land is needed. There have been some suggestions that the industrial park be redeveloped as something other than industrial, but the existing roads are not conducive to intense commercial or mixed uses. Further, the City needs places where a large employer can find sufficient acreage for development.

Neighborhood Commercial Locations

Fredericksburg is an old community that once had numerous small-scale commercial activities within residential areas. Many of these commercial ventures did not survive the arrival of shopping centers, but those that were located at reasonably well-travelled intersections managed to stay in business and even thrive. Those that serve neighborhood needs - such as small restaurants, beauty parlors - are encouraged to remain in business and the City has designated many of the older residential areas for neighborhood commercial uses.

Mixing commercial and residential uses requires careful attention to potential impacts though, because the sanctity of the home must be respected. Residents expect to be able to live in a quiet manner and commercial uses in proximity to residences need to operate in such a manner that the two uses can coexist. As an example, a previous use that consisted of a late night bar may no longer be a suitable neighborhood element, but transitioning that use to a neighborhood tavern and restaurant, with different hours, may become an appropriate modification that supports this neighborhood commercial concept.

Business Opportunity Goals

Goal 1: Downtown as a Center for Commerce, Culture, and Community

Ensure that downtown Fredericksburg continues to serve as a center of commerce, art, culture, recreation, historic amenities, and government, in order to provide economic stability and a sense of community. Actively pursue the preservation and adaptive reuse of downtown buildings and ensure that infill projects are designed with sensitivity to the City's historic character.

Goal 2: A Well-Balanced Mix of Uses Downtown

Achieve a sustainable mix of commercial and residential development in downtown Fredericksburg that fits the historic character of the urban core and helps people to live, shop, and work in the city center.

Goal 3: Business Development

Ensure the City can accommodate and capture its projected share of regional economic growth, by actively recruiting desired new businesses and providing for retail and office space development in areas identified for growth.

Goal 4: Community Character

Preserve and enhance the City's visual appeal by pursuing patterns of development that respect the City's historic growth pattern (mixed-use development) and by installing landscaping and street trees (complete streets).

Goal 5: Mixed-Uses in Corridors

Achieve mixed-use development patterns as redevelopment occurs within designated corridors, by blending commercial and residential uses, as appropriate to specific locations.

Goal 6: Complementary and Connected Business Districts

Ensure that new suburban business districts complement and connect to the City's downtown and its business corridors, through multi-modal transportation and a commercial mix that offers a wide variety of goods, services, and jobs. Strive to create pedestrian connections between all business districts, as feasible and appropriate.

Goal 8: A Live Here/Work Here Community

Enhance business development opportunities through provision of an educated and skilled work force, incubation of local businesses, and active recruitment of desired outside businesses.

Business Opportunity Policies

The following key policy statements provide guidance for enhancing new and existing business opportunity districts:

1. Pursue mixed-use land development patterns, while also respecting and enhancing viable business districts and the City's industrial park.
2. Continue to develop corridor-specific studies and area plans, as needed.
3. Actively pursue public and private initiatives to install street trees and landscaping, and to relocate overhead utilities, as feasible and where appropriate. Seek consistency in landscaping materials and encourage use of native plants in landscape design.
4. Improve the existing suburban business districts to accommodate pedestrians, cyclists, and transit.
5. Implement development/redevelopment standards that promote a human-scale, pedestrian-oriented, transit friendly community, through site layout, building configuration, landscaping, signage, parking lot design, vehicle and pedestrian circulation, stormwater management, and environmental protection.
6. Continue to coordinate with neighboring jurisdictions when developing long range plans for infrastructure and land use.
7. Consider partnership opportunities for establishing a regional visitor center.

Business Opportunity Initiatives

The following initiatives outline key steps for implementing the long-term goals and guiding policies for Fredericksburg's business opportunity districts:

1. Adjust zoning provisions to encourage mixed-use development that allows for greater densities and appropriate building heights, setbacks, and uses.
2. Develop corridor-specific design guidelines that articulate the expected form and nature of new development along designated corridors.
3. Evaluate form-based regulations as optional overlay regulations for use in selected areas, to encourage development that meets adopted goals in designated corridors.
4. Encourage development/redevelopment activity by creating redevelopment plans, especially for older shopping centers, that will diversify uses and provide for improved multi-modal access, landscaped parking areas, and improved lighting and signage.
5. Explore the potential for a regional visitor center near Interstate-95 that could function as a gateway to the area's Civil War battlefields as well as to the City of Fredericksburg.
6. Redesign the City logo to reflect the accurate date of its founding (1728).
7. Pursue both public and private funding opportunities for improvements to corridor infrastructure.
8. Continue to evaluate the effectiveness of commercial zoning standards to include building heights, setbacks, density, ground floor uses, floor area ratios, materials, special exceptions, and other design standards.
9. Work with the Economic Development Authority to develop incentives for development and redevelopment in designated areas.
10. Work with the United States Postal Service to ensure a functioning post office remains in downtown Fredericksburg when the distribution facility is relocated.
11. Work with the Economic Development Authority to develop an economic development master plan that will guide business recruitment efforts and incentive agreements.

Chapter 7:

Residential Neighborhoods and Housing

Background

The City's physical design determines how well it functions – whether all residents can get to places beyond their neighborhood, whether children have access to playgrounds and popsicles, and whether a house guest can find a parking space. Older parts of the City exhibit architectural diversity, tree lined streets, and sidewalks, which are all features that define Fredericksburg's character and contribute to its charm. Newer development, however, is often more typical of suburban communities, where the emphasis on automobile access sometimes comes at the expense of pedestrian safety. Suburban style neighborhoods are attractive in their own right, but their basic design can sometimes limit interaction.

It is the interaction of neighbors that constitutes a well-functioning and successful community. To this end, the residential setting must be considered welcoming and safe. Neighbors must be comfortable with their surroundings. Fredericksburg was initially a relatively compact place. Electricity and automobiles, however, facilitated growth beyond the urban center and publicly funded roads opened up outlying areas to development. Suburban growth is dispersed, dramatically increasing average daily travel between houses, jobs, and shopping.

A community's cohesion is thus directly linked to its design. In recent years, the environmental sustainability of buildings has been rated through a system called Leadership in Energy and Environmental Design (LEED). The U.S. Green Building Council, which developed LEED, has also worked with the Congress for New Urbanism and the Natural Resources Defense Council to extend the LEED certification concept to entire neighborhoods. This new set of standards is called LEED-ND (Neighborhood Design). The idea is to develop neighborhoods that are accessible, interconnected, and strong components of the community. When LEED-ND standards are applied locally, the desired characteristics of an integrated community are

already evident, which is no surprise since the standards were developed by looking at historic places like Fredericksburg in the first place.

The neighborhood concept is important to Fredericksburg's long-term health and welfare, serving as the first level of community interaction. There is a growing emphasis, through LEED-ND and otherwise, on creating what are called livable communities. The concept is to ensure neighborhoods are accessible and affordable. Safety, walkability, transportation options, social interaction, and access to shopping, work, and health services are universal goals and should be available to all citizens, including children, elderly persons, and persons with disabilities.

While neighborhoods are the building blocks of the community, individual houses are the building blocks of a neighborhood. Fredericksburg has an array of housing types, ranging from Colonial era dwellings to modern day condominiums. Numerous historic neighborhoods impart a traditional charm to the community, while newer neighborhoods provide additional housing choices to a growing population. The City's housing and real estate market is affected by three major factors, as follows:

1. The City is closely linked, by rail and roadway, to the Northern Virginia/Washington D.C. Metropolitan Area and the higher wages/salaries paid in this larger metropolitan context influences the cost of local housing, causing prices to increase.
2. The value of Fredericksburg housing is increasing faster than local incomes, which is causing a severe problem with affordability.
3. The student population at the University of Mary Washington brings a strong demand for rental units to adjacent City neighborhoods.

Neighborhood Design

Some of Fredericksburg's residential neighborhoods are new, many are old, and some are part of the residential/commercial mix that is downtown. Most of the City's residential areas are accessible by means other than automobiles and are also close to services and entertainment. Where neighborhoods already approach full accessibility and livability, the City intends to protect those conditions. Where neighborhoods were established without full accessibility or have other limitations, the City will explore options to better integrate those neighborhoods into the larger community. Potential solutions to address isolated areas include trail connections and transit services.

Identified challenges facing Fredericksburg's neighborhoods include a variety of issues related to infrastructure, provision of services, tree cover, parking management, traffic control, and

redevelopment pressures. Some problems are self-inflicted. Decisions to widen neighborhood sidewalks from four to five feet, for instance, have too often reduced the area between the sidewalk and the curb that was provided for street trees when the neighborhood was developed. There is no state or federal requirement that sidewalks must universally accommodate two wheelchairs side by side. As a consequence, this trend can be halted and even reversed, allowing a healthy tree cover to be maintained/reestablished.

The design of existing neighborhoods also merits more respect. Some neighborhoods have alleys, which provide a route for overhead wires (leaving the streets open for trees) and offer options for off-street parking and trash service. Some of these alleys have become blocked over the years - by trees, fences, and debris – eliminating their carefully designed neighborhood function. Alleys need to be returned to a functioning status.

Buildings and roads can be built almost anywhere because of contemporary engineering capabilities. For a community to function, however, its individual components need to be assembled in a logical pattern that places due emphasis on the residents of the community rather than the initial developer. When evaluating new development or redevelopment, there are four essential principles of neighborhood design, regardless of size. Those persons who will actually live within and experience the environment being built, the users, are the focus of these principles:

- Function – Ensure that the proposed environment will work effectively for the convenience and comfort of all users.
- Order – Ensure users will be able to readily understand and orient themselves to the environment.
- Identity – Ensure that the visual image of the environment reflects the community's values and character.
- Appeal – Ensure that the environment will give pleasure to its users, over time.

The following guidelines provide a comprehensive approach to planning, by acknowledging travel of all kinds. This emphasis on transportation is important because infrastructure is such a basic component of functional design. Cities do not work well with only one mode of transportation, as has become the case in outlying suburban jurisdictions. The following urban goals must also be considered very early in the development process because they are the means for the community to grow economically, while remaining functional to all of Fredericksburg's citizens.

Provide a Pedestrian-Friendly Environment

- Design streets to ensure safe pedestrian crossings to bus stops.
- Reinforce pedestrian access through appropriately sized and unobstructed sidewalks.
- Provide shade trees on all streets, to the maximum extent feasible.
- Allow streets to frame vistas or to terminate at places with visual appeal (parks, etc).

Ensure Pedestrian Connections

- Provide a coordinated system of internal sidewalks as well as bicycle/foot trails that connect to other parts of the City.
- Locate pedestrian routes and hiking/biking trails along existing travelways, as much as possible, rather than in the rear of residential areas.
- Link pedestrian routes and hiking/biking trails to local destinations. Where street connections are not feasible, provide properly designed alternative linkages between residential and commercial areas.
- Ensure pedestrian routes and hiking/biking trails link to bus stops.
- Provide bicycle racks at various destinations (multi-modal exchange points, commercial areas, recreational sites).

Provide Interconnected Streets

- Avoid uninterrupted block faces that preclude pedestrian circulation.
- Provide multiple travel routes that do not require the use of arterial roadways.
- Provide a coherent and interconnected street system, to diffuse traffic as well as to ensure convenient pedestrian and bicycle circulation.

Maintain a Clear Hierarchy of Streets

- Construct neighborhood streets so as not to compromise pedestrian safety and to avoid excessive automobile speeds.
- Ensure primary and secondary streets provide appropriate connections, yet discourage through-traffic in neighborhoods with traffic calming features incorporated into the secondary roadway design.
- Avoid the use of arterial streets within residential neighborhoods. Where busy roadways already pass through neighborhoods, implement traffic calming measures.
- Ensure local streets are no more than adequate for automobiles and emergency and service vehicles, as a means to provide for travel and parking without creating the

conditions that encourage excessive speed. This configuration will also allow street trees to form an overhanging canopy.

Maintain/Reestablish Alleys

- Make use of alleys for overhead utilities (leaving the streets open for trees) and for access to off-street parking (relieving on-street parking).
- Reclaim alleys that have grown up with trees or been blocked by debris and/or fences.

Integrate Transit into the Community

- Use transit stops as community focal points.
- Allow mixed uses around transit stops, so users can combine activities into one trip.
- Consider transit needs very early in the development process.

Provide Linkages

- Anticipate pedestrian travel routes to bus stops and other destinations and provide the appropriate pedestrian facilities.
- Ensure that persons with disabilities can access the community through accessible transportation options.
- Ensure pedestrian routes are easily recognized through unified pavement textures, trees, signs, and street furniture.

Ensure the Safety of All Users

- Without compromising automobile safety, design local streets with minimum widths, turning radii, and design speeds as a means to ensure pedestrian access and safety.
- Design intersections with minimum widths, both to slow traffic and to reduce pedestrian crossing distances.

Evaluating Development/Redevelopment Plans

There is no single means to provide an attractive, well functioning community. Instead, the guidelines noted above are considered together and deliberate steps taken during the development/redevelopment process to achieve results that meet the City's needs. This process is not limited to residential areas, but should be used when considering development adjacent to intact neighborhoods. The integrity of cohesive residential areas must be protected

from incompatible uses, disruptive impacts such as noise, light, and traffic, and from the unmitigated loss of trees and open space.

Housing

During the past several decades, the Fredericksburg area has experienced rapid housing development to meet the needs of a growing population. The predominant type of construction has been townhouses and apartments, but the City has also seen its share of new single-family detached housing. Much of this growth is a direct result of the area's physical links to the Northern Virginia/Washington D.C. metropolitan area and its strong economy related to supporting government functions. Since Fredericksburg is within commuting distance of this massive employment center, the anticipated demand for new housing is in the townhouse and condominium market. Interestingly, condos and townhouses are key elements of mixed uses, which characterize Fredericksburg's historic development.

Historically, downtown Fredericksburg had residential units above commercial storefronts. Many of these units have been brought back into use and other downtown residential development is being built. Suburban development had deliberately moved away from mixed uses, but this trend proved to be economically unsustainable and there is a renewed appreciation of greater densities and mixed uses. Increased density, within a high-quality urban setting, provides a residential retail base and also promotes social interaction, which leads to a place becoming a community. A strong urban design is key, however, because increased density, in and of itself, is not sufficient to produce a sense of place. As has been noted above, good urban design is the critical component for creating attractive/desirable neighborhoods.

Projected professional job growth for the City and the region is anticipated to maintain the market demand for townhouses and condos. Unfortunately, housing costs will continue to rise as well, which is a welcome tax base, but a challenge for being able to ensure that all citizens will be able to find a decent place to live within their means.

Impact of University of Mary Washington

The University of Mary Washington has developed new housing for its student population. Residential capacity is a total of 2,786 beds, 1,826 of which are on campus. Off-campus, 342 beds are available in an apartment complex on William Street and another 618 students are housed in apartments that are part of a mixed-use development called Eagle Village. There are slightly more than 1,700 students who commute, but only about 500 students list

Fredericksburg as their place of residence. There are no records to indicate if these students live with family or find rental units near the campus. Another 250 students (approximately) do not list an address, but are very likely to live in rental units near campus. The City and the University recognize that neighborhoods around the campus have a high percentage of rental properties and are working together to reduce any adverse impacts to the host neighborhoods.

Inventory

Completion of Interstate-95, in the early 1960s, opened up the City and surrounding counties to considerable residential growth. Beginning in the 1970s, there was a decided increase in multi-family dwelling units and the City experienced a shift toward a renter-oriented household population. Table 7-1 shows the trend, although it should be noted that the category for multi-family units includes everything from duplexes to apartments.

Table 7-1. Types of Units in Fredericksburg.

Census	Total Housing Units`	Single-family detached units	Multi-family units
1970	4,571	67%	33%
1980	6,339	56%	44%
1990	8,063	42%	58%
2000	8,888	41%	59%
2010	10,603	41%	59%

Source: U.S. Census Bureau (Note: The identical numbers for 2000 and 2010 are correct).

By 2000, the mix of housing types had become heavily multi-family. Shifting the emphasis toward single-family development arrested this trend and the City's single-family detached houses held steady at 41 percent of its housing stock in 2010. This figure had increased to 42 percent in 2014 and the American Community Survey indicates that 86.8 percent of such housing in Fredericksburg is owner-occupied. Single-family detached housing, however, also represents the most expensive housing option. The demand for rental units has not diminished and rents have increased significantly.

A 2014 report by the National Low Income Housing Coalition (*Out of Reach*) illustrates the cost burden of the City's housing to a lower income population. A minimum wage earner, for example, needs to work 115 hours per week to afford to buy a two-bedroom apartment. Alternatively, that unit would be affordable to 2.9 minimum wage workers working 40 hours per week. For renters, a two-bedroom apartment in Fredericksburg would require 3.9 full-time jobs to be affordable.

One of the trends in Fredericksburg housing over the past 15 years has been the increase in condominium units. Although apartments and condominiums can look similar, condominiums are sold to an owner and they are typically built to a higher standard, due to the differences between the rental and ownership markets. The incidence of new single-family detached homes is going to diminish in the future because there are very few tracts of land available for such development. Instead, the number of multi-family units is going to increase within this urban setting, with condominiums likely to increase the homeownership rate.

Homeownership

Evaluating homeownership levels involves looking at both economic as well as demographic trends. Comparative census data reveals a startling increase in the City's housing values. During the period 1980 to 1990, local housing more than doubled in value, from an average of \$48,700 to \$104,900. These figures represent an increase of 115 percent, when the statewide average increase was 89 percent. The 2000 census showed the average price of a house in Fredericksburg to be more than \$134,500. The 2010 census revealed that this average value had jumped to \$333,000, which reflects a change of an astonishing 148 percent. The national housing crisis of 2008 had only a minimal impact on local real estate values, reflecting the substantial influence of Washington D.C./Northern Virginia on the local market.

Demographic data shows a higher number of low income persons in urban centers than are found in suburban jurisdictions. These statistics translate to higher rates of homeownership in the suburban counties. Homeownership levels in Spotsylvania and Stafford Counties, for instance, are 78.0 and 78.3 percent, respectively. These percentages are slightly more than double the rate of homeownership in Fredericksburg (see Table 7-2), but a straight comparison is neither realistic nor useful. Cities simply have a more diverse population than suburbs. The

Table 7-2. Homeownership in Fredericksburg.

Census	Households that owned their own home
1970	50.9%
1980	40.9%
1990	37.3%
2000	35.6%
2010	37.6%

City has taken several steps to increase its homeownership, through community development programs and attention to neighborhood design that attracts owners. This effort has been

reasonably successful in stabilizing the percentage of homeowners in the City. Fredericksburg continues to actively evaluate other ways to increase homeownership rates.

While a comparison with similar sized cities shows that Fredericksburg has a lower homeownership rate than many other places, some additional factors need to be considered. The barriers to homeownership relate to the City's median income compared to median home values. For example, Fredericksburg's median income, at \$45,951, is comparable to Charlottesville (\$44,535) and Winchester (\$45,959). Fredericksburg's median home value, however, is at \$333,000, while those other two jurisdictions are lower (Charlottesville \$286,400, Winchester \$241,900) and therefore relatively more affordable.

Fredericksburg's real estate prices reflect the City's proximity to the housing market in Northern Virginia, which is an enormous external factor. Still, Fredericksburg's homeownership rate, at 37.6 percent, is not much lower than Charlottesville's, at 40.8 percent. Winchester is at 49.5 percent, though. As noted above, the City has managed to increase its homeownership rate over the past decade and ongoing townhouse and condominium development should help to increase this rate in the future.

Special Needs

According to the 2010 Census, there are 2,447 persons in Fredericksburg who are considered to have a disability. This number is 9.9 percent of the City's overall population and does not include any persons who are institutionalized. Many special needs persons live with families, but a large number live in the community independently, which often requires modifications and adaptations to their existing housing units. The City has a community development program that helps to eliminate architectural barriers and other organizations do similar work.

The City encourages development of a variety of housing. Some developments are reserved for eligible low income families and individuals. The Uniform Statewide Building Code requires that newer multi-family housing include a percentage of units that can be adapted to persons with disabilities. These units are also typically located on the first level of residential complexes.

Housing Conditions

Slightly more than 15 percent of Fredericksburg's houses were built prior to 1940. Twenty-nine percent were constructed prior to 1960. The age of a building is not typically a determinant of condition, however. The City has entire neighborhoods of very early homes that are

exceptionally well-maintained, while some newer neighborhoods exhibit significant signs of wear. The City has actively enforced the Virginia Maintenance Code, which is part of the Uniform Statewide Building Code, as a way to monitor building conditions. A rental property inspection program also discovered large numbers of residential units that were substandard, but this program was discontinued due to budget constraints.

Fredericksburg has long recognized the interrelationship of both human and physical resources in developing strong, livable communities. Established neighborhoods benefit from a solid base of homeowners, but low income residents who occupy older homes often lack the means to adequately maintain them. Fredericksburg is a Community Development Block Grant entitlement community, which bring in funds from the U.S. Department of Housing and Urban Development. Using these funds, the City provides several programs that relate to neighborhood conservation. Numerous houses occupied by lower income owners have been maintained through timely repairs to roofing, plumbing, and electrical systems (arresting water damage and addressing safety). A homeowner assistance program also helps low income homebuyers to acquire a house.

Affordable Housing

The importance of stable housing cannot be overstated, but the need for affordable housing surpasses its availability. A safe, decent home is a basic need for human dignity. In addition, a child needs proper housing for a fair start in life. The concept of affordable housing looms large for localities trying to meet the needs of a diverse population, but defining such a term has been problematic. In 1989, the City of Fredericksburg adopted the following affordable housing policy that recognizes the full range of the community's social and demographic conditions:

All persons who live and/or work within the City of Fredericksburg should have the opportunity to rent or purchase safe, decent housing within their means.

The City has consistently allowed a wide range of housing types to be developed. In addition to neighborhoods of single family homes, many apartment complexes serve a wide range of economic levels. There have been concerns that too much multi-family housing negatively impacts the City's homeownership rate, especially when Fredericksburg is compared to the neighboring counties of Stafford and Spotsylvania. Suburban counties, however, will always have higher homeownership levels because of the nature of their dispersed development patterns. Cities are more compact, which allows a wider range of residents to more readily gain access to jobs and local services without having to own an automobile (or their own home).

The City's affordable housing policy has emphasized and encouraged a range of housing to be developed and has also resulted in specific programs to help keep housing affordable. One program provides tax relief to qualifying elderly persons. Other programs provide emergency home repairs to lower income homeowners, which helps to keep homeowners in their homes and as well as maintain the City's affordable housing stock. The City also seeks to prevent persons with housing from becoming homeless.

Research indicates there are two major subgroups of homeless persons. The first is a relatively small group of unaccompanied individuals with disabling conditions, such as a mental disorder and/or substance abuse problems. They experience a long-term homelessness because of an inability to adapt to employment or to maintaining a household. The second group of homeless persons is much larger and consists of families as well as individuals who do not have a disabling condition and are typically employed, but who experience short-term or intermittent periods of homelessness because their permanent housing situation is precarious.

Churches, non-profit organizations, and the City government have partnered for decades to address homeless needs. An evolving understanding of the two types of homelessness has helped to focus these efforts considerably. For the larger, non-chronically homeless, population, housing affordable to their income level is the critical need. For the chronically homeless, however, recent research has begun to make evident that the most cost-effective way to actually reduce homelessness is to get a homeless person into a residential unit appropriate to that person's needs, as quickly as possible. There will always be a need for emergency shelters and programs to train people in life skills, but rapid re-housing has been shown to cost less than the monetary impacts of leaving persons unsheltered. The success of this concept has made it the focus of available federal funds.

Goals for Residential Neighborhoods and Housing

Goal 1: Neighborhood Character

Preserve the character of the City's neighborhoods, by respecting and maintaining their functional design (sidewalks, alleys, street trees, etc.).

Goal 2: Neighborhood Quality

Enhance the quality of the City's residential areas, to promote livability and a sense of community. Livability is defined as safe and walkable, with a variety of housing choices and ready access (walking, biking, transit, automobile) to work, shopping, and services.

Goal 3: Distinct and Attractive Neighborhoods

Ensure the residential areas of the City continue to comprise a collection of distinct and attractive neighborhoods, each possessing a sense of place, history, and shared identity.

Goal 4: Adequate Public Services and Facilities

Ensure that residential neighborhoods are adequately served with efficient and multi-modal transportation, available parking, street trees, and public services.

Goal 5: Enhanced Connections

Support inclusive neighborhoods for the elderly and persons with disabilities, through multi-modal transportation that enhances connections between affordable and accessible housing, places of employment, other neighborhoods, and services.

Goal 6: Compatible Design and Functionality

Ensure that development and redevelopment is visually compatible with the overall character of the City as well as functional for all citizens, with visitability standards that ensure a basic level of access to all new housing, such as no-step entryways, wide hallways, and other features that allow homes to be adapted to persons with disabilities.

Goal 7: Affordable Housing

All persons who live and work in Fredericksburg should have the opportunity to rent or purchase safe, decent, and accessible housing within their means.

Goal 8: Variety of Housing

Provide a variety of housing opportunities throughout the City that respect the character of the community.

Goal 9: Homeownership

Encourage homeownership opportunities and seek to achieve a homeownership rate within the City of at least 40 percent.

Goal 10: Housing Maintenance and Upkeep

Maintain and protect the City's housing stock, through proper enforcement of state and local codes, to ensure an adequate supply of housing that is safe and healthy.

Policies for Residential Neighborhoods and Housing

Fredericksburg has adopted its housing and neighborhood policies to enhance a livable community for all citizens.

1. Respect the integrity and the character of the City's neighborhoods.
2. Control and manage on-street parking, as needed, in residential neighborhoods near the University of Mary Washington, and monitor for effectiveness.
3. Implement traffic calming measures in neighborhoods where cut-through traffic endangers resident safety.
4. Protect existing and re-establish missing tree cover in residential neighborhoods.
5. Establish and maintain connections between neighborhoods and the overall community, through multiple modes of transportation.
6. Allow for greater housing density when creating or redeveloping mixed-use neighborhoods.
7. Incorporate the concept of complete streets (travelways for automobiles, pedestrians, and cyclists, with attractive tree cover) in new residential neighborhoods.
8. Increase homeownership opportunities while also ensuring the City achieves an appropriate mix of housing choices (single-family homes, townhouses, loft apartments, accessory apartments, etc.).
9. Maintain the supply of affordable housing through appropriate community development programs that rehabilitate existing owner-occupied housing and improve the physical quality of housing and neighborhoods.
10. Ensure residential rental properties are properly maintained in a condition that is safe and sanitary, in accord with state and local regulations.
11. Eliminate vacant housing blight through aggressive property maintenance programs.
12. Provide options for citizens to age in place, through senior housing programs that help adapt houses to developing needs.
13. Ensure that persons with disabilities are able to find housing that is accessible and where they can obtain housing support, if needed.

14. Do not allow gated communities within the City limits.
15. Encourage infill development that is compatible with established neighborhoods, in terms of scale and massing.

Initiatives for Residential Neighborhoods and Housing

These initiatives outline key steps for implementing the City's long-term goals for its residential neighborhoods:

1. Continue to evaluate infill regulations to ensure that additions and new construction do not adversely impact the character of existing neighborhoods.
2. Monitor neighborhood parking needs and develop appropriate on-street restrictions, as needed. Monitor existing restricted areas to ensure effectiveness.
3. Ensure neighborhood infrastructure needs continue to be met through the Capital Improvement Program.
4. Study the condition of all existing alleys in residential neighborhoods to determine how they can be re-opened and/or reestablished to enhance the maintenance, service, and parking needs of residential units.
5. Continue to implement the City's Consolidated Plan for Community Development Programs.
6. Reestablish the pro-active rental property maintenance program to improve conditions in City neighborhoods and to address problems that create unsafe and unsanitary conditions for renters as well as result in neighborhood degradation.
7. Continue to work with the University of Mary Washington to address student/resident issues in neighborhoods surrounding the University.
8. Actively pursue initiatives to develop housing opportunities for senior citizens and persons with disabilities.
9. Ensure new development adjacent to established neighborhoods is properly buffered.

Chapter 8:

Historic Preservation

Background

Fredericksburg is characterized by a rich concentration of historic buildings, dating from 1737 to the modern day. The Virginia House of Burgesses established the town in 1728 and its historic downtown represents nearly three centuries of human occupation. The City established its Historic District and adopted its first historic preservation ordinance in 1968. An appointed Architectural Review Board administers the necessary review process within that Historic District, to help preserve the City's historic resources as well as manage the changes inherent to an active and growing community.

Downtown Fredericksburg is the community's government center, its central business district, a residential neighborhood, a center for local arts and culture, and a venue for entertainment. Downtown is also the focus of the City's history, with hundreds of historic buildings in active use as homes and businesses. The proximity of the Rappahannock River also reflects the relationship between the built environment and a natural resource that once powered local industries and remains a source of drinking water.

There are also a great many resources outside of the downtown Historic District. Within the City limits, there are a variety of historic mansions, riverfront industrial buildings and sites, and battlefield terrain. Outside the City limits, but still on City-owned land, are aboriginal sites, additional mill sites, Civil War trenches, navigational canals, and remnant of dams.

Fredericksburg's Historic Character

Historic Development

The first successful English settlement in the New World occurred at Jamestown, in 1607. The next year, Captain John Smith explored the Chesapeake Bay and worked his vessel up to the falls of the Rappahannock River. This farthest reach of navigable river, where Fredericksburg

would one day be built, was as far west as Smith would penetrate. His contact with the Native American inhabitants proved hostile and the explorers withdrew. Europeans would not return until conflicts with Native Americans in the Tidewater region had forcefully cleared the way.

When the Virginia Colony finally began to grow beyond the Tidewater, it established trade centers at the falls of major waterways. Fall line settlements included Petersburg on the Appomattox River, Richmond on the James River, Fredericksburg on the Rappahannock River, and Alexandria on the Potomac. River-powered mills initially served agricultural needs, but soon drove manufacturing. Some of these industries provided arms and equipment to George Washington's army during the American Revolution.

Following independence from Britain, the Virginia Piedmont's agricultural base grew and the discovery of gold drew the attention of miners. During the first half of the nineteenth century, various interests attempted to construct canals, turnpikes, and railroads as critical transportation links to the west, but state support proved inadequate and most of these improvements remained marginal efforts.

The region became a battleground during the Civil War. Railroads constructed just a few years earlier, on a north/south axis, effectively linked the two warring capitals of Washington D.C. and Richmond. The iron rails provided the means to field and sustain enormous armies and Union and Confederate forces subsequently fought at Fredericksburg (1862), Chancellorsville (1863), and the Wilderness and Spotsylvania Court House (1864). The end of slavery also wrecked the local economy as tens of thousands of enslaved persons left the area to seek new lives as free men and women.

Recovery from the Civil War took decades. Gold mining in Virginia had been significant before the war, but had also been very labor intensive because the gold had to be extracted from quartz. When the California strikes occurred in 1849, the mining companies had moved on to an easier extraction of this noble metal in the West. Tobacco farming continued to give way to wheat and produce and a growing seafood industry survived, but it was the flow of the Rappahannock River that revived milling and manufacturing operations. Still, the pace of recovery proved exceedingly slow.

The river-oriented industrial pattern began to change in the early twentieth century. Improved roadways removed an almost exclusive reliance on railways and river shipping. Electrical power, even when water-generated, reduced the need to locate actual industries along waterways, where they were susceptible to flood damage. As north-south highways

established links to other economic regions, only Richmond retained its east-west orientation between Virginia's interior reaches and its primary seaport in the Norfolk area.

Changing political conditions also resulted in a permanent military presence in the region. The Marine Corps established a training base at Quantico during World War I. The U.S. Army set up Camp A.P. Hill during World War II. In 1918, the U.S. Navy established its weapons proving ground at Dahlgren, which is now called the Naval Surface Warfare Center. There are additional military facilities beyond this region, in and around Norfolk and Washington D.C. and their growth during the Cold War dramatically changed the region's economy and demographics.

Historic Character

The significance and value of historic buildings and sites is found in people's response to them. History is not contained in just places, in and of themselves, but rather in their power to evoke reactions such as an appreciation of traditional craftsmanship, a delight in architectural innovation, or an interest in historic persons and events. Yet what a community finds important is always changing.

Fredericksburg is clearly a place that has developed over time. Its buildings and architecture stretch across nearly three centuries, yet it remains a contemporary commercial center and a vibrant residential area. It is both continuity and change that defines the community. There are buildings that date to the mid-eighteenth century adjacent to structures constructed in the twenty first century. The historic integrity of these various resources is important, but what the historic setting exhibits more than anything else is resilience. Preservation of historic resources within the context of an active, living community is what makes Fredericksburg attractive, both as a place to live as well as to do business. The dynamic of continuity and change is also a challenge that requires preservation policies that protect local resources while allowing new development.

Legal Basis of Preservation

Federal, State, and Local Rules

The U.S. government involves itself in preservation through the 1966 National Historic Preservation Act. This statute makes historic preservation an integral part of federal

undertakings. The regulation of land use, however, is a state function and such things as zoning, building codes, and historic preservation occur well beyond any federal authority.

Virginia's enabling legislation for historic preservation is quite brief, but provides the basis for localities to protect their historic assets. The statute provides for establishment of historic districts, a related review process, and an avenue for appeals. In describing the review process, the State Code specifies that local review is to ensure that development will be "architecturally compatible" with the designated historic district's landmarks, buildings, and structures.

Few things deteriorate faster than vacant buildings so historic preservation policies seek to keep historic buildings in active use. Fredericksburg's preservation ordinance requires its review board to refer to The Secretary of the Interior's Standards for the Rehabilitation of historic properties, which were developed to help adapt historic buildings to contemporary uses, while protecting their significant features. These rehabilitation standards were designed to protect the historic character of such buildings, accommodating changes within clear parameters so they can be reused for their original purpose (such as a home) or adapted to a new use if the historic use is no longer realistic (such as a mill or a stable).

Managing Change

Since the key to preservation is for buildings to remain in active use, the Fredericksburg review board works with property owners who seek a viable use of their property, whether residential, commercial, or otherwise. The City has recognized that the historic parts of the City remain attractive as well as active because they have been adapted to meet changing needs (such as plumbing and air conditioning). Old buildings not adapted to contemporary uses end up abandoned as economically unfeasible. Revitalization also entails new construction where buildings lost to time or neglect have left gaps in the streetscape. Historic preservation does not seek to encapsulate an image but rather recognizes the dynamic of human activity. The City's challenge is to ensure historic buildings can be used and maintained and that new development occurs without compromising its historic setting. The City's historic character is a perceivable and tangible asset that merits recognition and protection.

Fredericksburg's Stewardship of Historic Resources

The City regulates certain aspects of construction undertaken by private property owners within the established historic district. In addition, the City has developed incentives and other

supports for preservation as well as engaged in identifying historic resources throughout the City. These various activities are described more fully below.

Historic District Zoning Overlay

The local historic district ordinance provides for the associated regulatory process that preserves Fredericksburg's historic character, but the City also sought formal recognition of its historic downtown by the Virginia Historic Landmarks Commission. In 1971, the State Historic Landmarks Commission voted to place Fredericksburg's Historic District on the Virginia Landmarks Register. In 1972, the Keeper of the National Register listed Fredericksburg's Historic District on the National Register of Historic Places. Listing downtown Fredericksburg on the two registers allows property owners to seek state and federal historic preservation tax credits. The City expanded its locally designated historic district to include an industrial area, a school built around 1900 to serve African American students, and portions of a prominent Victorian neighborhood on Washington Avenue (see Map 8-1). These areas are potentially eligible for listing on the State and National Registers, but the necessary nomination documentation has not been developed.

Public Outreach

To better support the considerable efforts of private property owners, the City developed a Historic District Handbook. This publication has become extremely popular with local residents as well as investors. It contains an overview of the City's history, an explanation of how a historic zoning overlay functions, clear guidance for preservation of existing buildings, criteria for new construction within the Historic District, and appendices on architectural terms, architectural styles, and more. In addition, a related brochure provides a ready reference on Historic District procedures as well as identification of city offices where help is available.

Certified Local Government Program

The Federal government's Certified Local Government program was meant to establish a standard for local government historic district administration that would reflect federal and state preservation standards. Fredericksburg meets all applicable criteria and has been designated a Certified Local Government since 2004. There are significant differences between federal and state programs and local government regulation, but the intent of the CLG program is to enhance communication by standardizing the discussion that is preservation.

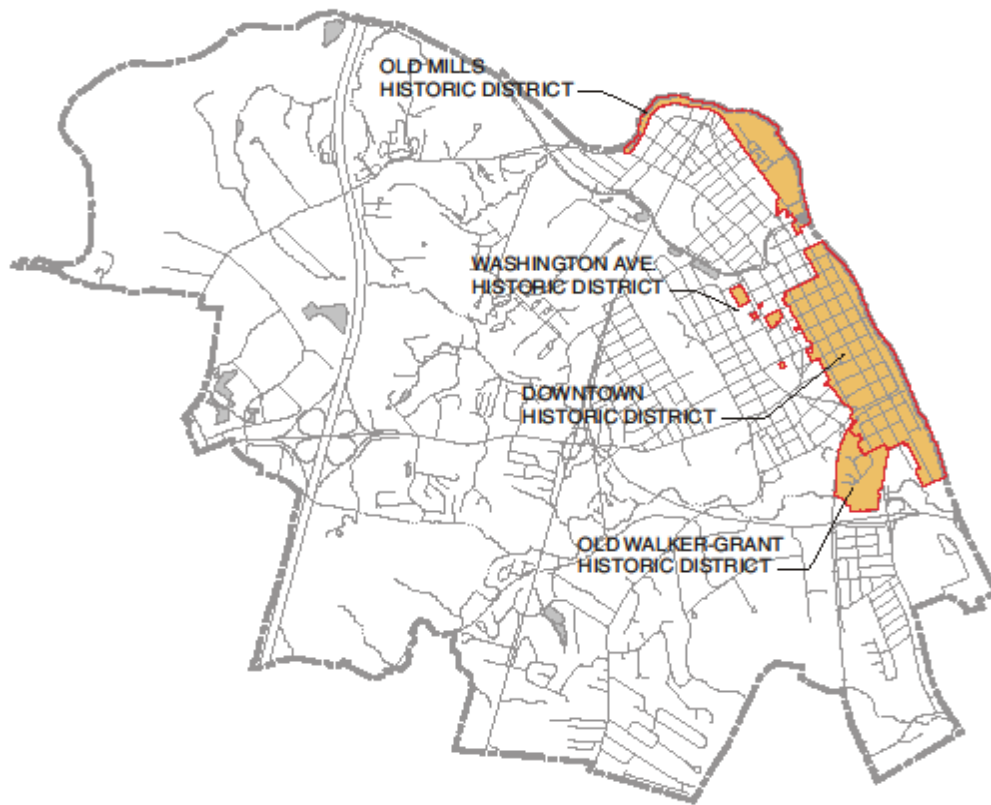
Historic Preservation Incentives

Most historic properties in Fredericksburg are privately owned and the City has developed several programs to help with their maintenance. The Commissioner of Revenue, for instance, has a property tax abatement program that phases in the increased property taxes that result when a property is improved. The City also has a Property Maintenance Code Official to ensure that properties are not allowed to deteriorate from neglect. A related Rental Property Maintenance Program had been very successful in helping to ensure these types of properties were properly maintained. For citizens who do not have the means to repair older homes, the City provides housing rehabilitation and emergency repair programs, using federal funds (Community Development Block Grant) to ensure those houses remain safe and sanitary.

Historic Buildings Inventory

The City has partnered with the Virginia Department of Historic Resources to survey all buildings within the Fredericksburg Historic District as well as buildings within a potential expansion area for the District. This process began in 2006 and progressed in three phases through 2010. The total number of buildings surveyed was 1,497 and this data is being used to update the Historic District listing on the National Register of Historic Places. The initial Nomination for this District was 1971, which means that only properties that were built in 1921 or earlier are eligible for state and federal preservation tax credits. Updating the Federal listing in 2015 will expand the eligibility for state and federal tax credits to buildings constructed in 1965 or earlier. The local preservation zoning overlay is separate from this Federal designation.

The City Council has also directed staff to nominate the Historic District expansion area to the State and National Registers, but not place those areas within the local zoning overlay. This step will allow property owners to benefit from historic preservation tax credits, if they desire, but will not bring them under the purview of the local Architectural Review Board. Placing properties within the Historic District overlay is typically initiated by the affected neighborhoods. The Historic District and the potential expansion area are shown on Map 8-2.



Map 8-1. Fredericksburg's Historic Districts.

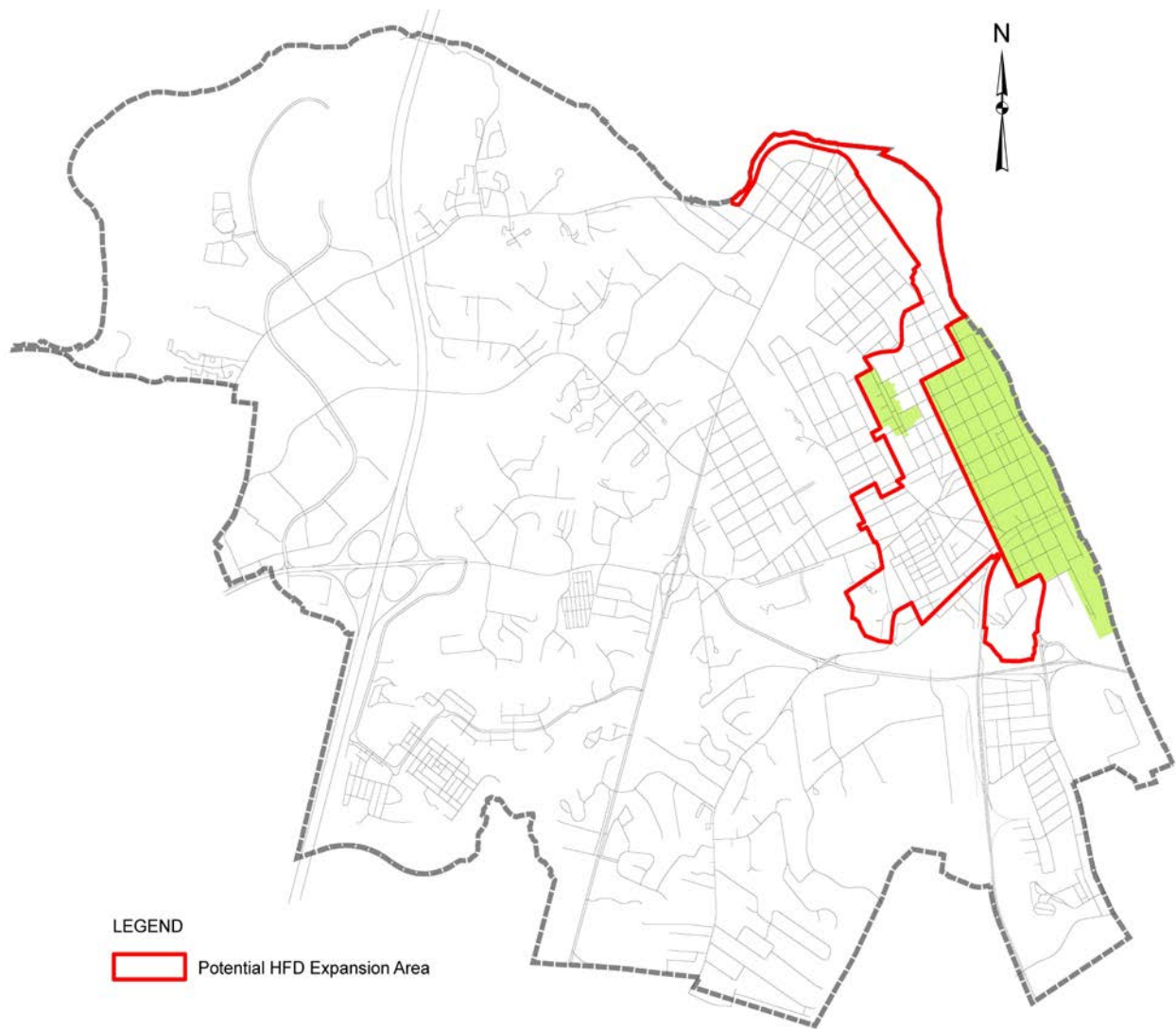
City-Owned Historic Properties

The City owns an impressive collection of buildings. These properties are maintained according to preservation standards, while providing for continued public use. In the downtown area, the City maintains City Hall, the Renwick Court House, the City Visitor Center, and the Old Stone Warehouse. In other parts of the City, designated departments maintain a stone dwelling, selected cemeteries, and the Rappahannock Canal. The City also protects archaeological sites within municipal parks and has also routinely engaged in archaeological investigations during construction of public buildings. The City seeks to serve as a model for rehabilitating historic buildings and construction of new buildings that are compatible with their historic surroundings.

Battlefields

Fredericksburg is intimately associated with the Civil War and has developed a close working relationship with the Fredericksburg and Spotsylvania National Military Park. The City and the Park have readily accommodated one another, when feasible. As an example, the City relinquished its right of access to a portion of Sunken Road, so the National Park could restore that scene to its 1862/63 appearance, as much as possible. The City has a downtown Civil War walking tour that links the urban battlefield within the Fredericksburg Historic District with the National Park's visitor center at Sunken Road. The Park has allowed the City to construct a portion of a bicycle-foot trail on Federal lands, recognizing that the new trail will open up opportunities for interpretation in a previously obscure part of the battlefield along the Virginia Central Railway and in the Hazel Run valley.

The City partnered with the Central Virginia Battlefields Trust and the Virginia Department of Conservation and Recreation to acquire 11 acres of battlefield land along Smith Run, near Cowan Boulevard. This parcel has since been transferred to the City's custody. When Gateway Boulevard is extended from State Route 3 to Cowan Boulevard, this property will be accessible to vehicles and will be improved as a City park. A battlefield trail has already been established along Smith Run, through wooded land under easement. Near Hugh Mercer School, the City preserved another five acres of battlefield land as mitigation for construction of a regional stormwater pond. Other preserved sites in City ownership include Confederate earthworks and a large winter encampment.



Map 8-2. Potential Historic District Expansion Area.

Battlefield Lines of Sight

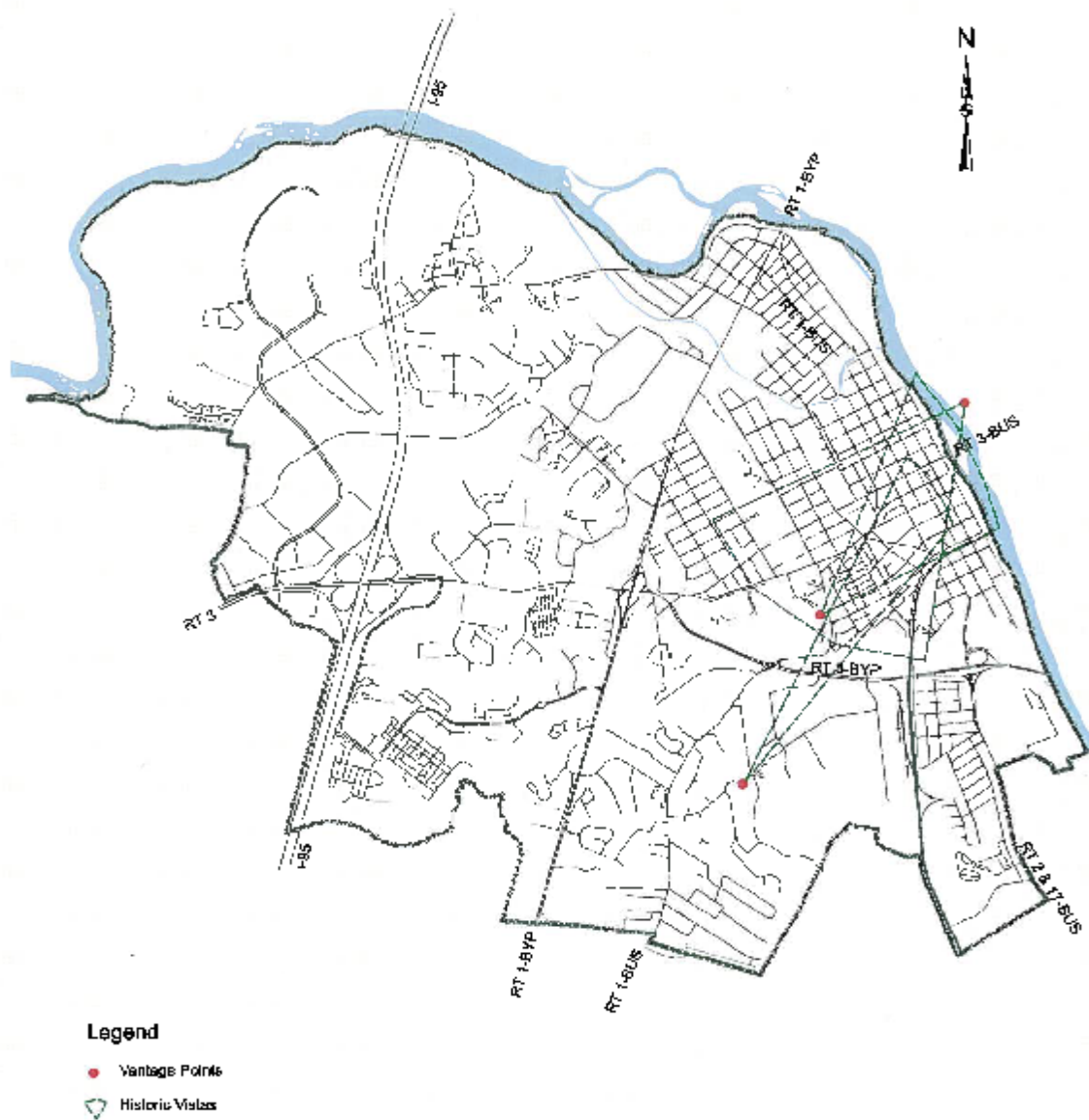
Fredericksburg has a distinctive skyline, established during a period of ambitious construction during the 1840s and 50s. The iconic view includes the steeples of St. George's Church (1849) and Fredericksburg Baptist Church (1855) as well as the cupola of the Fredericksburg Court House (1852). The many photographs and sketches that came out of the Civil War established this skyline as one of Fredericksburg's character defining features and there are three overlooks of this historic vista within the Fredericksburg and Spotsylvania National Military Park – at Chatham, Willis Hill, and Lee's Hill.

When reviewing development/redevelopment within these battlefield vistas, the City seeks to determine if any new features will extend above the horizon within the viewsheds. A new building that would remain below visible tree lines and buildings would not be considered intrusive, but a new building that would break the horizon would need to be addressed to ensure it would not visually compromise an identified historic view. The National Park Service has the challenge of establishing vistas that give a feel of the 1860s landscape, which is the Park's period of significance. Fredericksburg's period of significance, however, did not end with the Civil War and ongoing construction is part of the City's history. As a consequence, the policy to evaluate lines-of-sight does not seek to avoid anything new being visible. Essentially everything is visible. Instead, the policy is to avoid visual intrusions into the City's skyline. The defined battlefield lines of sight are shown on Map 8-3.

Historic Sites on the City's Watershed Property

Fredericksburg owns nearly 4,800 acres of riparian property within five upriver jurisdictions (Spotsylvania, Stafford, Culpeper, Orange, and Fauquier Counties). Approximately 4,200 acres have been placed in a conservation easement and many historic sites on this acreage have been carefully identified. There are still remnants of Native American settlements there, as well as sturdy canal locks, military entrenchments, gold mines, foundations of industrial mills, road traces, and more. The City presented this extensive mix of historic sites in a publication called *Historic Resources Along the Rappahannock and Rapidan Rivers*.

Most of this upriver acreage is relatively inaccessible by land, but canoeing and other river activities are feasible through various boat ramps. The City permits low-intensity recreation, but does not allow the integrity of the natural and historic resources to be compromised. Some



Map 8-3. Battlefield Lines of Sight.

areas could be integrated into a tourism program where canoes or other craft are the vehicle of access. In addition, some sites have the potential to yield significant information, through archaeological investigation. City policy is to tread lightly in natural areas and leave its riparian property unencumbered by signs and wayside panels.

Preservation Activities by Private Organizations

Washington Heritage Museums

In 1890, the Association for the Preservation of Virginia Antiquities (APVA) acquired the Mary Washington House and preserved it as a visitor attraction. The local Mary Washington Branch of the APVA assumed responsibility for the management and care of that house and also took on three other buildings that the APVA acquired over the years. These additional properties include the Rising Sun Tavern, the Hugh Mercer Apothecary Shop, and St. James House. The Mary Washington Branch recently established a new organization, called Washington Heritage Museums, to take local ownership of these houses. The goal is to enhance oversight and management and to develop dynamic educational opportunities. In 2013, Preservation Virginia (formerly the APVA) transferred ownership of these four eighteenth century properties to the local Washington Heritage Museums, which oversees them with great care.

Historic Fredericksburg Foundation

This local preservation group organized itself in 1955 and assumed the mission to preserve, protect, and revitalize the distinctive historic environment of the Fredericksburg area. Its headquarters is in the carefully restored Lewis Store, a 1749 commercial building constructed by George Washington's brother-in-law and apparently the oldest extant retail building in America. This group accomplishes its mission through education, advocacy, and financial support.

Fredericksburg Area Museum and Cultural Center

In 1985, the Commonwealth of Virginia chartered the Fredericksburg Area Museum and Cultural Center, which had established itself in the historic town hall (built in 1824). This government building had recently been vacated when City offices were transferred to a newly renovated post office, two blocks away. The Museum's mission is to collect, interpret, and present the history and culture of the Fredericksburg area. In addition to renovating the old

town hall, the FAMCC has seen to the rehabilitation of the historic Market Square for public use, and acquired a former bank building at the corner of William and Princess Anne Streets, where it has expanded its programs and displays.

The George Washington Foundation

The APVA was not the only local organization to acquire and protect local properties related to George Washington and his family. In 1922, a private group purchased Kenmore, which was the former residence of Washington's sister Betty and her husband Fielding Lewis. The Kenmore Association carefully restored this prominent brick dwelling and opened it to visitation. In 1996, this association aided in the acquisition and protection of Washington's boyhood home, called Ferry Farm. The organization also changed its name to George Washington's Fredericksburg Foundation, under which it acquired Augustine Washington's ironworks site, called Accokeek Furnace, in Stafford County. The foundation changed its name again in 2008, when it became The George Washington Foundation.

Central Virginia Battlefields Trust

Founded in 1996, this non-profit organization acquires battlefield land in fee simple and holds it in trust until it can be transferred to a government agency that will open it to the public, such as the National Park Service. This group has helped to acquire over 1,000 acres of land, 40 acres of which are within the Fredericksburg city limits. All of the newly protected acreage within the City has been transferred, either to the National Park or to the City government. The City-owned parcel consists of 11 acres adjacent to Cowan Boulevard that will be made into a park once access is provided from an extension of Gateway Boulevard. In addition, this group purchased the ante-bellum Howison House (Braehead) and resold it to a private owner, after placing preservation easements on the house and its surrounding 18 acres. The easement is held by the Virginia Department of Historic Resources,.

Central Rappahannock Heritage Center

Founded in 1997, this local non-profit organization provides a repository for historically valuable documents related to the central Rappahannock region. Their first-rate archival facility is in the Maury Center, which is open to the public and has been visited by researchers from all over the nation.

Fredericksburg VA Main Street, Inc.

The National Trust for Historic Preservation developed a program that helps localities to revitalize their traditional downtown through enhanced appearance, economic stability, community pride, and quality of life. Fredericksburg VA Main Street, Inc. has adopted the mission preserving and enhancing historic Fredericksburg's diverse and vibrant downtown community by pooling resources, ideas, and experiences to make Fredericksburg a better place to live, work, and play. This organization's vision is that 300 years of history can be blended into contemporary life.

Preservation Planning

In 2010, a citizens group identified a series of steps that could become a comprehensive historic preservation program in Fredericksburg. Their many recommendations fell into three broad goals, asking the City to pursue the following goals:

- Coordinate with the National Park Service
- Address Internal Procedures
- Develop an Archaeological Plan

Coordination with the National Park Service

Coordination between the City and the National Park Service is effective and mutually beneficial. This strong liaison has helped with the City's trails development as well as with planning improvements to Lafayette Boulevard, near Lee Drive. In turn, the National Park has been able to restore the look of the historic Sunken Road and extend its holdings to Willis Street. The City's support of the National Park's mission is ongoing.

Internal Procedures

Coordination of public sector responsibilities has been productive and brought several departments together to better manage development and redevelopment in the Historic District. As an example, the Planning Division has worked out effective procedures with Building Services to better administer the historic district review process and to provide stronger enforcement. The City also provides a technical review committee for comprehensive review of proposed development and an interdepartmental team to engage in coordinated enforcement of various codes.

An Archaeology Program

Fredericksburg's archaeological resources are an integral part of the City's history. Artifacts include such things as human remains, tools, bottles, dishes, nails, and more. The areas where such objects are found include graves, wells, privies, trash pits, ice houses, basements, and foundations. Archaeological sites, when properly excavated, can provide information that contributes to the general history of the community and to the particular histories of its inhabitants.

Since 1992, the City has funded archaeological digs during the course of large public projects. Extensive investigations were part of the construction related to the Virginia Railway Express parking areas, the municipal parking deck project, the downtown Marriott, and the new court house. The associated reports are on file with the City. Private developers also routinely engage in archaeology as part of their construction permitting process when Federal permits are required. The investigation and data recovery reports from these private efforts are filed with the Virginia Department of Historic Resources.

Associated with some of these archaeological investigations have been related educational components. Several display cases in the Marriott lobby have provided a venue to tell the story of that site as revealed by the archaeological record. The Fredericksburg Area Museum has developed displays of artifacts recovered from other private development sites. The new court house has a prominent display of artifacts recovered from that site.

Discussions related to developing a City archaeology program have focused on bringing public and private efforts together. Developers who send their archaeological results to the state agency have expressed a willingness to also provide the City with copies. The City would use this data, with its own material, for continued research when developing information for both visitors and residents. The City also has custody of a growing collection of artifacts and a large permanent location will need to be part of this ongoing discussion.

An archaeology planning group worked to develop an archaeology plan as a basis for developing an archaeological ordinance. The essential elements were to identify areas of the City where the ordinance would be applicable, as required by the State Code, and work out a process to protect them and recover information if they must be compromised. The Fredericksburg Area Museum, or some other educational entity, is also a critical component

because an archaeological program without an educational aspect would have no discernible purpose. This work is ongoing.

Historic Preservation Goals

Goal 1: City Character

Protect and enhance the character of Fredericksburg's historic area and city center as a means to preserve the community's sense of place, to promote economic strength, and to ensure the City's continued appeal to residents, businesses, and visitors.

Goal 2: Redevelopment

Promote redevelopment of downtown properties in a manner that reflects the character of the City as a vibrant and growing community.

Goal 3: Heritage Resources

Continue to recognize, protect, and interpret significant architectural, historical, and archaeological resources that constitute the community's heritage.

Historic Preservation Policies

Fredericksburg has adopted its preservation policies to enhance a dynamic and growing downtown community:

1. Maintain a comprehensive historic preservation program that helps to keep the City's historic buildings intact and in use.
2. Continue to improve entryway corridors into the Historic District.
3. Continue to set a high standard for sensitive stewardship of City-owned properties.
4. When considering the adaptive reuse of any public building, ensure that the structure's historic integrity will be preserved

Historic Preservation Initiatives

These initiatives outline key steps in implementing the City's long term goals for historic preservation and an active downtown community:

1. Expand the National Register Historic District (using newly available documentation of the City's historic resources) so property owners can seek state historic preservation tax credits.
2. With property owner support, consider expanding the historic overlay district or create new historic overlay districts to more fully protect the historic resources of the City.
3. Ensure that the City's zoning ordinance encourages reuse of historic buildings, through varied uses, flexibility in applying zoning requirements, and attention to development patterns that preserve the City's character.
4. Maintain local incentives, such as the property tax abatement program, to encourage investment in the City's historic buildings. Continue to monitor for effectiveness.
5. Protect buildings from neglect and disrepair, by maintaining a strong property maintenance program.
6. Explore the creation of a fund to foster the preservation of significant historic structures that are slated for demolition or otherwise endangered.
7. Encourage development of educational experiences through tourism and school programs.
8. Coordinate internal government procedures to enhance the effectiveness of the City's historic preservation program.
9. Protect and enhance the continued public use of the Renwick Court House complex.
10. Continue to work with the National Park Service, to protect the integrity of the National Military Park as well as to address infrastructure issues and traffic patterns.
11. Respect battlefield lines-of-sight when evaluating development/redevelopment in areas of the City visible from Lee's Hill, Willis Hill, and Chatham.
12. Create a program that will identify and protect Fredericksburg's archaeological resources.
13. Continue to interpret historic sites along City trails and on sites owned by the City, such as the Mary Washington monument and Smith Run battlefield.
14. Re-institute the brick sidewalk program and relocation of utility lines.

15. Work with neighborhoods that may not be appropriate for historic district designation, but whose character is worth preserving through overlay zoning or other conservation measures.

Chapter 9:

Institutional and Jurisdictional Partnerships

Background

The municipal government has a great influence on life in Fredericksburg, but so do several other public and private institutions. The City does not have the means or the authority to meet the needs of everyone or everything within the jurisdiction and so works with other institutions, as appropriate. These other institutions have their own responsibilities and authority, but also share a commitment to the community in which they live and work. Useful partnerships have been forged to share information and coordinate various efforts.

University of Mary Washington is the largest employer in Fredericksburg and thus has a tremendous economic impact on the City. The student population, which exceeds 5,000 enrolled students, also have an impact. The City meets with University officials on a regular basis to review and discuss areas of mutual interest and concern.

Mary Washington Hospital is the second largest employer in Fredericksburg and the associated Medix Health Services has an enormous presence in the entire region. The City has consistently worked with and supported the hospital as it has expanded.

National Park Service administers the Fredericksburg and Spotsylvania National Military Park, which is comprised of more than 7,000 acres of preserved ground in the City and four counties. The Battlefield Park is a nationally significant resource that was established in 1927, under the control of the War Department. The National Park Service assumed responsibility in 1933. The City works with the Park staff on a regular basis, not only to ensure that ongoing development does not compromise the Park's integrity, but to integrate recreational facilities, as feasible and appropriate to the battlefield visitor experience.

Upriver Watershed Property Easement Holders include the Virginia Outdoors Foundation, the Nature Conservancy, and the Virginia Board of Game and Inland Fisheries. The Department of Game and Inland Fisheries owns and maintains the boat landing at the City Dock. City staff routinely works with these organizations to ensure the easement properties are not compromised by encroachments or other intrusions. This liaison includes scheduled inspections of the easement properties, to monitor conditions, as well as evaluation of recreational impacts related to special events. In addition, the various easement holders assisted in developing watershed property management policies.

George Washington Regional Commission coordinates planning within the City and the Counties of Caroline, King George, Spotsylvania and Stafford to ensure a competitive regional economy, to reduce redundancies in government, and improve implementation of regional projects. There are 21 planning districts in Virginia and this area is designated as Planning District 16. The Planning District Commission also staffs the Fredericksburg Area Metropolitan Planning Organization (FAMPO), which engages in regional transportation planning.

Continuum of Care is a coalition of governments and service providers working to end homelessness within the community. It consists of facilities such as shelters as well as services that reach beyond temporary housing to address problems such as mental illness, alcoholism, and drug addiction. The emerging concept in providing this type of assistance is to get homeless persons into housing as rapidly as possible, with all applicable support and services to help them remain housed. This approach has been found to be measurably more cost effective than absorbing the costs of homeless shelters, homeless services, and homeless persons seeking medical care through hospital emergency rooms. A cohesive continuum of care is cost effective.

Goals for Institutional and Jurisdictional Partnerships

Goal 1: Information Exchange

Exchange information, coordinate services, and arrange for joint use of facilities between the City and its institutional partners.

Goal 2: Regional Planning

Work collaboratively and coordinate efforts with neighboring jurisdictions.

Goal 3: New Partnerships

Identify new institutional/jurisdictional partnerships, as needed to achieve regional goals.

Policies for Institutional Jurisdictional Partnerships

1. Maintain strong liaisons with the University of Mary Washington and Mary Washington Hospital, to share information, support each other's initiatives, and to coordinate efforts.
2. Ensure that neighborhoods near the University are not adversely impacted by growing enrollment.
3. Continue to work with neighboring jurisdictions on regional planning and transportation, through the George Washington Regional Commission and the Fredericksburg Area Metropolitan Planning Organization.
4. Maintain regional partnerships that are actively reducing the incidence of homelessness in the community.

Initiatives for Institutional and Jurisdictional Partnerships

1. Continue to participate in regularly scheduled Town/Gown meetings.
2. Support the University of Mary Washington's Small Business Development program.
3. Continue to work with the City's riparian easement holders to protect the upriver watershed properties.
4. Continue to maintain a close liaison between the Planning Department and the National Park Service.
5. Continue to participate in all aspects of regional planning
6. Identify specific projects and areas of aligned interests that may be developed in collaborative efforts.
7. Actively participate in the regional continuum of care process.

Part III:

Land Use

Fredericksburg's land use plan translates adopted policies into the community's desired development pattern. It establishes the City's vision and expectations for how land will be used. Every parcel of land within the City carries a land use designation. This Plan defines the full set of land use categories and then maps them.

This Part III outlines the overall land use plan and identifies specific planning areas:

- Chapter 10: Land Use Plan
- Chapter 11: Planning Areas

Chapter 10:

Land Use Plan

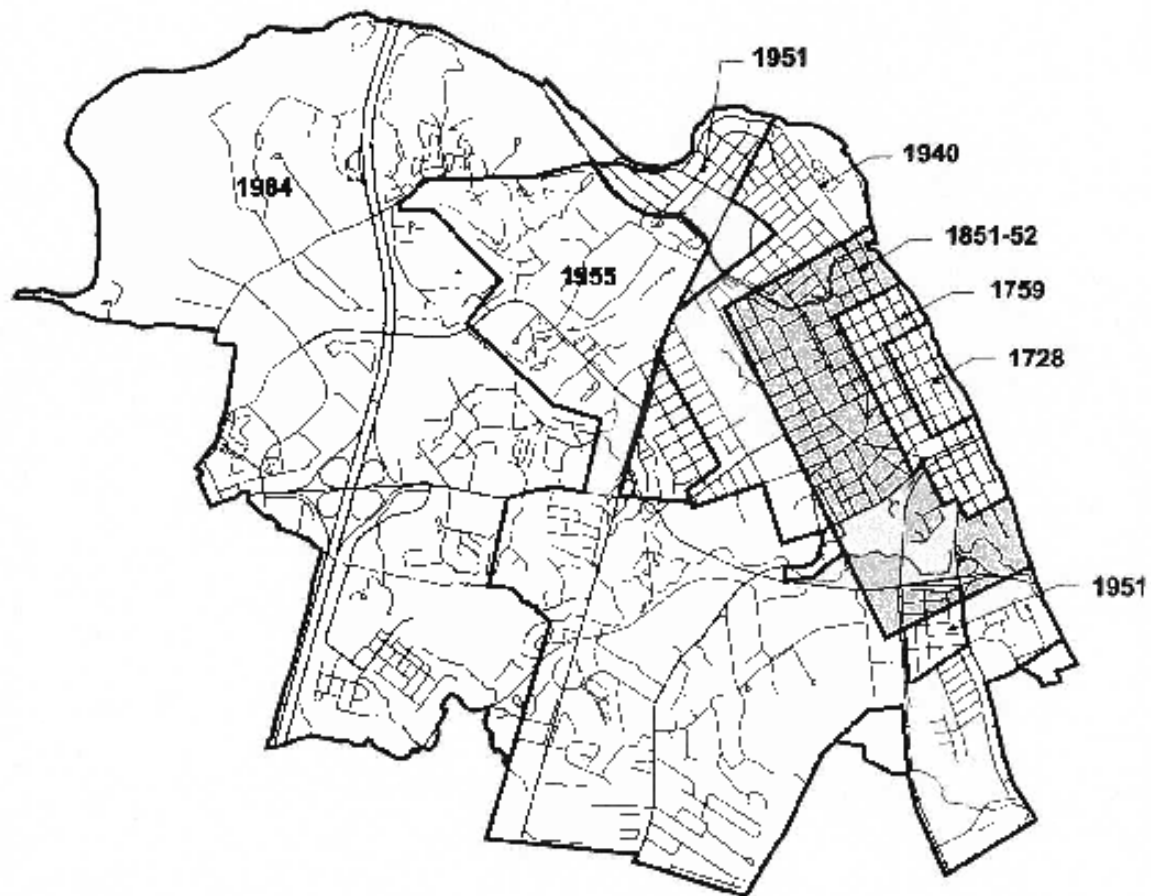
Background

Fredericksburg's Land Use Plan reflects both existing land use patterns as well as the goals for future land use. It is the foundation for decision making when land is zoned for specific uses.

Historic and Existing Land Use Patterns

Fredericksburg's current land use patterns are a direct result of its changing transportation links. The older parts of the City, including the historic central business district, are oriented to the Rappahannock River and the railway. Later development became concentrated along major roadways. Construction of Interstate-95 linked the City firmly with the Northern Virginia-Washington D.C. area.

The City's annexation pattern illustrates Fredericksburg's response to the changing transportation routes, upon which any community depends. The original 1728 town expanded twice before the Civil War with a clear focus on the Rappahannock River. The post-war industries still relied on the river and the railway as connections to the larger economy, but new roads, beginning in the early twentieth century, began to alter the economic focus. U.S Route 1 initially passed through town, but newer highways deliberately bypassed urban areas. This new concept allowed through-traffic to flow better, but also drew commercial activity and housing construction away from the urban core. Annexations in 1951 and again in 1955 were efforts to gain control of intersections where economic development could become part of the City's tax base. The last annexation occurred in 1984, when the City gained approximately 4.4 square miles from Spotsylvania County, including three full quadrants of the interchange at Interstate-95 and State Route 3 and a portion of the fourth quadrant. Map 10-1 shows the City various annexations.



Map 10-1. Fredericksburg's Annexations.

The Land Use Plan

This Comprehensive Plan calls out seven general land use categories, such as residential, commercial, and so on. Within these general categories are 17 land use classifications, such as low-density residential, commercial-downtown, and so on. These categories and classifications are summarized below.

Land Use Categories and Classifications

Residential

Low-Density Residential – Residential development at four units per acre is generally a conventional subdivision. Some parts of the City are zoned for two units per acre, but these districts are typically rezoned to a higher density so they can be developed in a manner more appropriate to an urban location. Where the land has historic resources and/or attractive natural features, the City encourages innovative layouts and clustering, to retain attractive open space and to protect sensitive lands.

Medium-Density Residential – New development that should be made consistent with existing neighborhood patterns may need to have greater densities than a conventional subdivision. Many infill and transition areas are more suitable to having eight units per acre, with the flexibility to be able to include a planned mix of single family-detached as well as single family-attached units.

High-Density Residential – Apartment development needs a density of 12 units per acre or more. Denser residential districts exist in several locations within the City, but no additional land is anticipated to be zoned for development that exceeds 12 units per acre. There is also a residential district for mobile homes, but there is only one such district in the City and no new mobile home districts will be allowed.

Planned Development-Residential – By definition, mixed-use development consists of activities that can function independently, but which benefit from proximity to one another. This flexible land use category is characterized by a combination of medium or high density residential development with a supporting commercial element. This approach can also be used where compatible design elements are desired, where open space preservation is feasible, and other related concepts are appropriate. Of particular interest is being able to plan the layout and construction so as to protect and incorporate watercourses and associated stream valleys, forest cover, scenic vistas, as well as preservation of historic resources.

Residential-Mobile Home – Mobile homes are no longer allowed in Fredericksburg, but a mobile home park still exists in the northeast quadrant of State Route 3 and the U.S. Route 1 Bypass. This quiet, well-kept neighborhood cannot be expanded.

Commercial

Commercial-General – The City has two general commercial categories. The category for shopping centers encourages development of grocery stores, personal service establishments, and similar operations that serve the local community. A category for commercial activity along highways is generally characterized by retail and wholesale activities, services, offices, and restaurants. The City discourages further strip retail development, however, and seeks to replace these two commercial categories with a more suitable planned development-mixed use category.

Commercial-Downtown – Downtown Fredericksburg has historically been a relatively dense urban setting that encouraged a variety of interrelated uses. This designation promotes continued harmonious development and redevelopment, with an emphasis on maintaining pedestrian circulation, the integrity of the street grid, and continuity with the historic character of the community.

Commercial-Transitional/Office – The areas between residential and commercial districts are transitional spaces. This Commercial-Transitional/Office category provides for limited retail uses and small scale offices, with appropriate landscaping and screening, to provide a transition between quiet residential areas and more intense commercial districts.

Planned Development-Commercial – This category is reserved for large scale development near major transportation routes. Planned Development-Commercial encourages a wide range of commercial retail and service uses oriented to serve a regional market. The City also encourages employment centers that combine office and professional business development within a landscaped, high quality setting.

Planned Development-Mixed Use – The Planned Development-Mixed Use category encourages office, retail, and residential uses, designed in a unified and cohesive manner. The intent is to promote development that has a pedestrian-scale, urban forms and amenities, and pedestrian links within the development as well to the larger community. Many areas of the City suitable for redevelopment would benefit from the substantial flexibility from conventional use districts, with their dimensional requirements. As noted above, the City seeks to replace the Commercial-Shopping Center and Commercial-Highway districts with this Planned Development–Mixed Use category that is more suitable to an urban environment. Specific

regulations for such mixed use areas would establish a variety of levels of intensity, to reflect specific neighborhood characteristics and circumstances.

Industrial

Industrial-Light Intensity – This category is designed to encourage research and development type uses in well-landscaped industrial park settings, with surfaced driveways and walks that are compatible with all types of adjacent uses. With this light intensity industrial category, the City seeks a broad range of clean industries operating under high performance standards.

Industrial-General – The general industrial category allows for manufacturing, wholesale and limited ancillary retail uses, warehousing, offices, and distribution facilities. These districts are located where they can be served by adequate transportation access.

Institutional

This land use category includes public and semi-public uses such as City-owned facilities, schools, and churches, as well as larger institutions such as the University of Mary Washington and federally administered battlefields. The City should establish a zoning district for these institutional uses, which account for a substantial portion of the jurisdiction's land mass.

Planned Development-Medical Center

A medical center campus includes closely related medical offices, diagnostic laboratories, pharmaceutical centers, special patient care units, and associated housing units. The medical campus thus provides a convenient and efficient health care and delivery system for the City and the region.

Parkland

This category includes open space that is used or intended to be as recreational areas. Existing and proposed City parks are included in this category, as are the holdings of the National Park Service.

Preservation

Land expected to remain essentially undeveloped has been designated under this general category, which acknowledges existing constraints and limitations of floodplains and certain Chesapeake Bay resource protection areas. Limited development may occur in certain areas, but with severe restrictions.

Land Use Planning Areas

This Comprehensive Plan designates 10 planning areas, to more effectively evaluate specific conditions and to make clear recommendations for land use within the City of Fredericksburg. In this manner, the general land use principles described in this Plan can be translated into clear policies.

Chapter 11:

Planning Areas

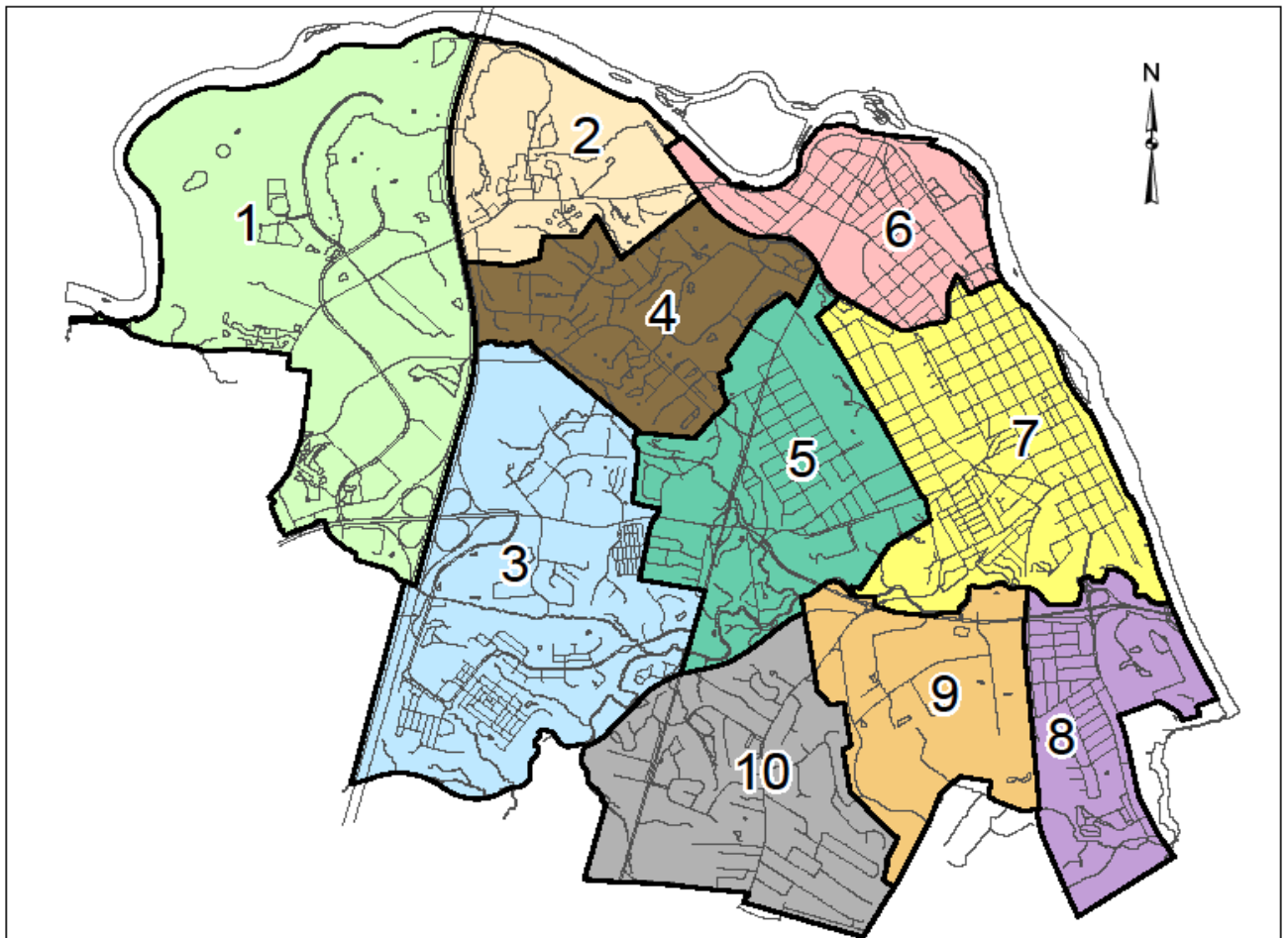
Background

The Land Use Plan incorporates ten planning areas, to more readily address specific conditions and to make clear recommendations for each area. The planning areas are identified below and shown on Map 11-1.

1. Celebrate Virginia/Central Park
2. Fall Hill
3. Plank Road/Route 3
4. Hospital/Cowan Boulevard
5. University/Route 1 (central)
6. Princess Anne Street/Route 1 (north)
7. Downtown
8. Dixon Street/Mayfield
9. Braehead/National Park
10. Lafayette Boulevard/Route 1 (south)

Each of these areas is focused on major components of the City's infrastructure, but each has a distinct and identifiable character, so their land use objectives vary. As a consequence, specific information is provided for each planning area, starting with a description of existing conditions, a summary of key issues, a summary of environmental and historical considerations, the status of infrastructure, each area's land use potential, and recommendations specific to each planning area.

Special area plans are needed for each of the above planning areas, to more effectively implement the goals, policies, and initiatives in this Comprehensive Plan. Developing closely focused area plans will be an ongoing process, but until they are completed, the following summary plans will be used to inform land use decisions.



Map 11-1. Fredericksburg's Land Use Planning Areas.

Land Use Planning Area 1:

Celebrate Virginia/Central Park

Setting

Planning Area 1 is bounded on the west and north by the Rappahannock River. Its east boundary is Interstate-95. On the south and west, this planning area abuts Spotsylvania County along River Road, Greengate Avenue, and State Route 3. The western half of the Interstate-95/State Route 3 interchange is located in this planning area. This part of the City is characterized by an upland plateau, well served by roadways and being actively developed. The river bluffs and a substantial floodplain comprise a large natural area. Map 11-2 shows this planning area in more detail.

The character of this planning district is defined by the Rappahannock River, with its adjacent floodplain and steep slopes kept as natural areas, and man-made features such as Central Park, Celebrate Virginia, Interstate-95, and State Route 3. The headwaters of three streams are sensitive land areas. Smith Run and North Hazel Run originate in the developed lands and then flow east, through residential subdivisions outside the planning area. Fall Quarry Run also flows east, but into a natural area just east of the interstate. Storm water management facilities mitigate the impact of the extensive impervious surfaces and ensure that Celebrate Virginia and Central Park do not cause flooding and erosion in the downstream neighborhoods.

Opportunities

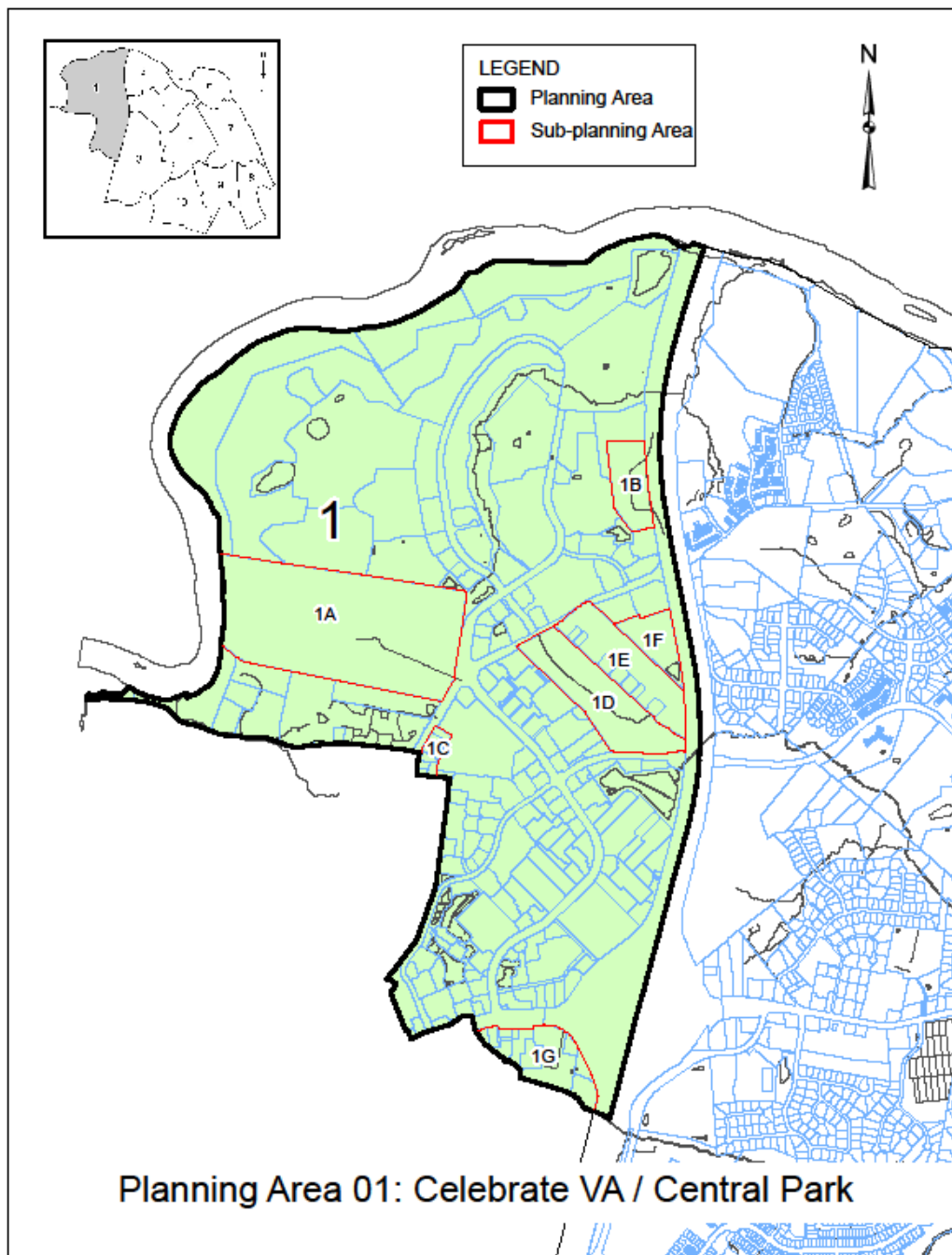
This planning area is developing with a diversity of uses. A planned interchange on Interstate-95 will allow for greater commercial activity, but the City has protected a significant amount of open space/natural area along the Rappahannock River. The following opportunities pertain to this planning area:

- Redevelop Central Park as a regional commercial activity center, through revised land use regulations that effectively promote higher levels of mixed use development. A critical component of this redevelopment will be an improved roadway network and bicycle/pedestrian access.

- Integrate the eco-tourism component of the Celebrate Virginia tourism campus into the protected natural area, while preserving the integrity of natural and historic features.
- Expand recreational activities into the protected river floodplain and natural resource areas so visitors can experience scenic vistas, intact natural areas, and historic sites.
- Support development of a multi-use Minor League Baseball stadium and additional ball fields for tournaments and training. Consider developing a surface parking lot adjacent to the new facility as a city project.
- Develop greenways and nature trails so they do not erode or damage the natural area and ensure such facilities avoid damage to historic sites.
- Develop a new interchange at Interstate-95 to serve the Celebrate Virginia area while also providing regional congestion relief at the Route 3 interchange.
- Enhance this gateway to the City, which is highly visible to travelers in the Interstate-95 corridor, to provide a distinctive and appealing sense of arrival.
- Work with other jurisdictions and resource agencies to establish a regional visitor center.
- Construct Fire Station #3 in Celebrate Virginia.
- Protect residential neighborhoods from existing and proposed commercial development through transitional uses and design standards that minimize adverse impacts.

Existing Land Use

This planning area is predominantly commercial, consisting of the tourism campus known as Celebrate Virginia and a regional retail center called Central Park. Celebrate Virginia includes multiple hotels, an exposition and conference center, retail activities, multifamily housing, and various services. Central Park consists of major retail, service, and office uses. A conservation easement covers 129 acres of both private and City-owned land along the river and its floodplain. There is also an additional 40 acres of City-owned riparian property outside the easement limits. This natural area is part of the visitor campus and is proposed to include outdoor recreational opportunities as well as historic interpretation areas. The area along River Road includes a townhouse development as well as a very low density residential neighborhood.



Map 11-2. Planning Area 1.

Table 11-1. Land Use Summary for Planning Area 1.

Corridor	Development	Type of Use	Size
Fall Hill Avenue	Celebrate Virginia	Commercial	497 acres
Fall Hill Avenue	Noble Cars	Auto sales	8.5 acres
Fall Hill Avenue	Riverside Manor	Residential	188 townhomes
River Road	Unnamed	Residential	4 single family homes
Route 3, Cowan Blvd.	Central Park	Commercial	310 acres

Environmental Factors

This planning area is characterized by erodible soils, moderate to steep slopes, highly permeable soils, a large floodplain, a large abandoned quarry, and wetlands. Most of the property drains to the Rappahannock River, but a portion drains to Fall Quarry Run, which flows under Interstate-95 to the east. The entire planning area is within designated Chesapeake Bay resource protection areas.

This planning area includes excellent views of the river and the adjacent landscape. The 169 acres of private and City-owned property, 129 of which are under easement, will screen development within Celebrate Virginia from in-stream activities on the Rappahannock River. The natural resource protection easement is held by the Virginia Outdoors Foundation.

Table 11-2. Preservation Areas in Planning Area 1.

Name	Size	Description
City owned riparian lands	101 acres	Wooded floodplain and uplands, historic sites
Celebrate VA conservation easement	68 acres	Wooded uplands and historic resources

Historic Resources

Planning Area 1 includes a large number of Civil War sites as well as remains of a canal along the river. The uplands include a scattering of archaeological sites that have either been left intact in designated protection areas or formally investigated, with reports filed with the Virginia Department of Historic Resources. Of special interest is the site known as Banks Ford, which was decisive terrain during the Civil War. The City owns the land on both sides of this crossing, which includes not only the ford itself, but two nearby pontoon bridge sites, a canal and its locks, wartime roads, and related earthworks. This planning area was also a battleground on May 4, 1863, but the tactical terrain has been considerably altered.

Table 11-3. Historic Resources in Planning Area 1.

Site Name	Period of Significance	Description	Ownership
Bank's Ford, Scott's Ferry	Used since earliest settlement, Civil War features	Three crossing points, roads, earthworks, canal and locks	City
Taylor's Canal, Rappahannock Navigation	Built in 1830s	Canal and locks, evidence of a dam	City
Confederate defenses	Civil War	Extensive earthworks on slopes overlooking river	Private (VOF easement)
Confederate encampment	Civil War	Hut holes near Fall Quarry Run	Private
Quarry	Possibly Ante-bellum origins, used into 20 th century	Stone quarry	Private
Aboriginal sites	Archaic/Woodland Period	Prehistoric camp sites	Private (VOF easement)

Land Use Potential

Three east-west corridors in Fredericksburg cross Interstate-95 into this planning area. State Route 3 and Cowan Boulevard are substantial roadways and the third road, Fall Hill Avenue, will be upgraded to a four lane divided road within the next two years. As a consequence, this planning area will continue to experience intense commercial development.

Table 11-4. Land Use Potential Outside Celebrate Virginia.

Sub Planning Area	Size	Current Zoning	Recommended Land Use
1A	120 acres	R-2 Residential	Planned Development-Mixed Use
1B	12 acres	R-2 Residential	Institutional: Visitor Center
1C	8 lots that comprise 4.25 acres	1 lot Commercial-Transitional; 7 lots R-2 Residential	Commercial-Transitional/Office
1D	37 acres	R-1 Residential	Planned Development-Commercial
1E	21.5 acres	R-1 Residential	Planned Development-Commercial
1F	11 acres	Commercial-Highway	Planned Development-Commercial
1G	22.75 acres	Commercial Highway	Commercial-General

Sub Planning Area 1A – This 120 acre site is adjacent to the Celebrate Virginia. The terrain is relatively flat, with grade differentials of around 30 feet, until abruptly dropping toward the river. The river bluffs are environmentally stable as well as picturesque. Proposed development is mixed-use, but residential development could also be an attractive option. The City has ensured that its own riparian lands constitute an intact wooded buffer, but this parcel represents a potential gap. The City should work with the landowner to maximize development on the upland, in return for protecting the steep slopes overlooking the river and their stabilizing tree cover.

Sub Planning Area 1B – The Virginia Visitor Center, with access to and from Interstate-95, is a 12 acre site controlled by the Commonwealth of Virginia. No land use changes are recommended. The proposed interchange would impact this area, but all preliminary planning for the road project retains the Visitor Center in this general location. This property has also been identified as a potential site for a telecommunications tower.

Sub Planning Area 1C – Eight single-family homes are located at the intersection of Fall Hill Avenue and River Road, but the intensity of the nearby development is isolating this once quiet residential area. The recommended future land use is Commercial-Transitional/Office, with the anticipation that the eight lots would eventually be consolidated and redeveloped comprehensively.

Sub Planning Area 1D – This tract is 37 acres in size and has frontage on both Fall Hill Avenue and Cowan Boulevard. The terrain is relatively flat and the proposed land use is Planned Development-Commercial. This parcel fronts on the planned signalized intersection on Fall Hill Avenue and a road connection between Fall Hill Avenue and Cowan Boulevard is feasible and should be established when the property is developed. Further, this new road should accommodate cross connections from Sub Planning Area 1E, when that property is developed, in order to provide a sound urban design.

Sub Planning Area 1E – This 21.5 acre parcel extends from Fall Hill Avenue to Interstate-95, but access is from Fall Hill Avenue only. The terrain is relatively flat and the proposed land use is Planned Development-Commercial. Planned traffic signals on Fall Hill Avenue fall outside this property's frontage so access is limited to right-in, right-out. Cross connections across the adjoining property should be considered to gain access to a signalized intersection.

Sub Planning Area 1F – This property has access to Fall Hill Avenue and could be used for a variety of things including as an expansion area for existing auto sales.

Sub Planning Area 1G – The southwest quadrant of the Interstate-95/State Route 3 interchange has been previously developed with motels and restaurants and has the potential for more intense commercial development.

Infrastructure

Central Park has direct access to State Route 3, but substantial improvements are needed to properly serve the commercial development in Celebrate Virginia. There are several projects either underway or contained within the regional long range transportation plan developed by the Fredericksburg Area Metropolitan Planning Organization.

Roads

Fall Hill Avenue – This east-west route will be improved from a two lane road to a four lane-divided roadway, with sidewalk on its south side and a multi-use bicycle/foot trail on its north side. This roadway will connect with Spotsylvania County's Bragg Road at its western end, which has already been expanded to a four lane, divided road to State Route 3. The overall project also includes replacement of the existing bridge over Interstate-95 and construction of a new bridge that matches the design of the road. This new bridge will also accommodate the new high occupancy toll lanes on the interstate. Construction began in 2015.

Central Park has benefitted from enhanced access from State Route 3 and completion of Cowan Boulevard. Fall Hill Avenue is already a four-lane divided road in this planning area and is being improved beyond this planning area to a four-lane divided road. The internal road network within Central Park is adequate to serve the completed development, but if redevelopment at higher densities is to be feasible, this internal network will need to be reconfigured for greater efficiency. As an example, a cross connection from Carl D. Silver Boulevard to Sub Planning Areas 1D and 1E would provide a transportation link consistent with good urban design.

High Occupancy Vehicle/Toll Lanes on Interstate-95 – The HOV/HOT lanes under construction in Northern Virginia will be extended as far as Exit 126, south of Fredericksburg. This project is funded through the Virginia Department of Transportation and anticipated to be under construction between 2021 and 2025. This project will entail significant changes to the Interstate-95/State Route 3 interchange.

Interstate-95 Interchange and Rappahannock Parkway Toll Road – A new interchange is under study to provide access to Celebrate Virginia as well as provide a connector road to State Route 3. This project will provide substantial congestion relief to the Interstate-95/State Route 3 area. Preliminary engineering for these two projects is anticipated to begin in 2016.

Trails

Cowan Boulevard includes a bicycle trail on its south side and a sidewalk on the north side, which provides pedestrian access across the interstate. The improved Fall Hill Avenue will also have a bicycle trail on its north side and a sidewalk on its south side. A trail connection can be made between these two facilities through Sub Planning Area 1D.

Two new trails are proposed to link Celebrate Virginia with the rest of the City. One trail (Embrey Dam/Rappahannock River Trail) will course along the Rappahannock River, passing under the Interstate-95 bridge. At its western end, it will connect with a network of recreational trails in Celebrate Virginia and at Motts Run, in Spotsylvania County. At its eastern end, it will link with the Rappahannock Heritage Trail/CanalTrail, which will provide access to the City's overall trail network. The second trail is part of the Fall Hill Avenue widening project and will cross over Interstate-95 on a new bridge that will replace the narrow existing bridge.

Traffic Calming

There are no traffic calming features in this planning area and none proposed.

Table 11-5. Transportation Summary for Planning Area 1.

Project	Location	Description
Fall Hill Avenue	Gordon W. Shelton Blvd. to Mary Washington Blvd. (extended)	Improve the existing road to four lanes, divided, with bicycle/pedestrian facilities
Fall Hill Avenue Bridge	Fall Hill Avenue and Interstate-95	Replace bridge in its entirety, as part of Fall Hill Avenue widening project
Interstate-95 Interchange, Preliminary Engineering	U.S. Route 17 (Stafford) and State Route 3	Establish new facility to access Celebrate VA as well as enhance commuting to and from Spotsylvania
Rappahannock Parkway Toll Road, Preliminary Engineering	Interstate-95, at Celebrate VA, to Gordon Road (Spotsylvania)	Establish a limited access toll road
Interstate-95 HOV/HOT Lanes,	Garrisonville Rd. (Stafford) to	Construct high-occupancy

Design and Construction	Exit 126 (Spotsylvania)	vehicle/toll lanes
Embrey Dam/Rappahannock Canal Trail	Along river, between Fall Hill Avenue and Celebrate VA	Independent trail along river and canal – natural surface
Fall Hill Avenue-Cowan Boulevard Link	Through Sub Planning Area 1D	Bicycle/pedestrian trail along a new road or as a trail on its own alignment

Land Use Planning Area 2:

Fall Hill

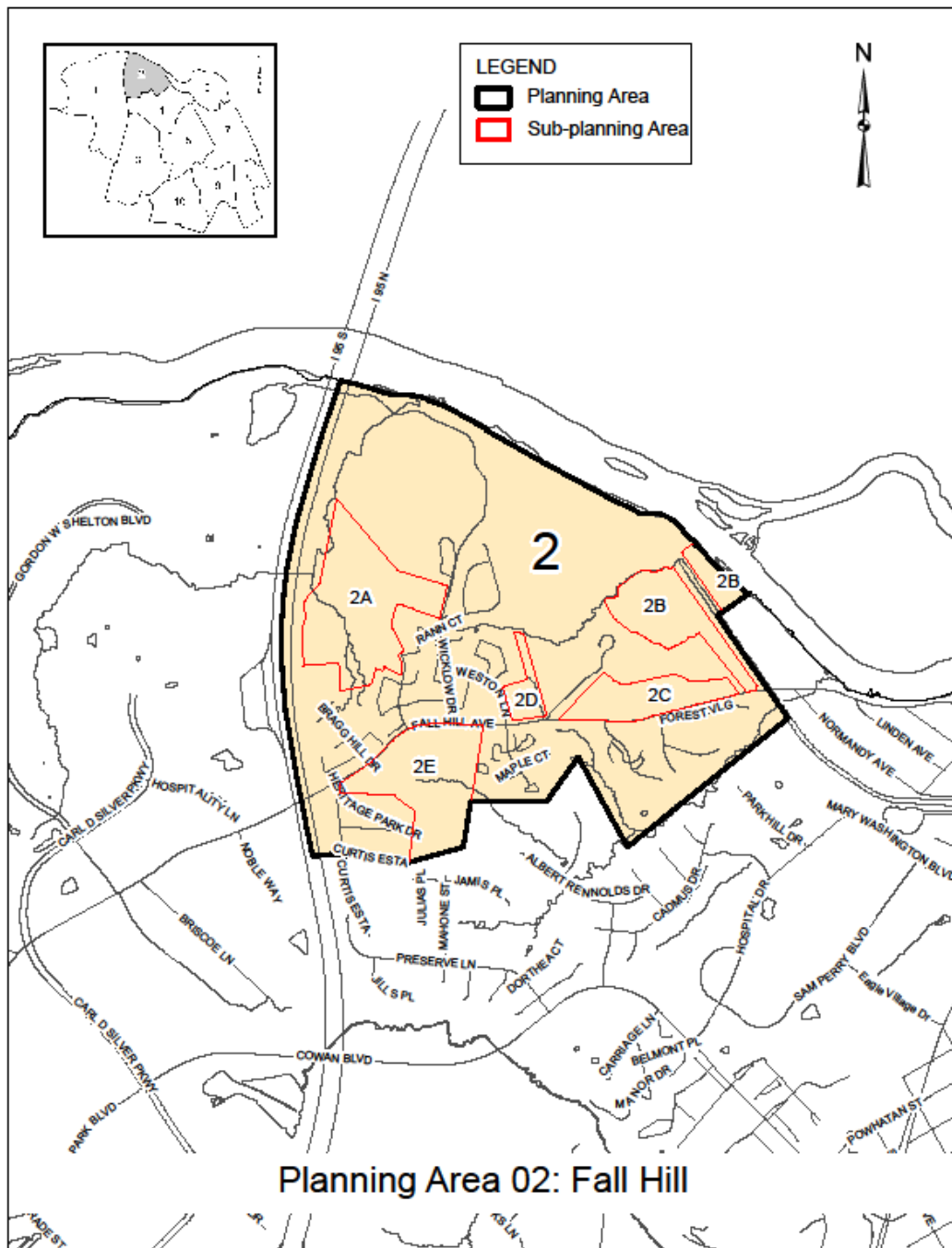
Setting

Planning Area 2 (Map 11-3) is bounded by Interstate-95 on the west, the Rappahannock River on the north and east, and by the properties along Fall Hill Avenue, which is this area's arterial roadway. The land use is predominantly residential, with some minor commercial development. There is considerable protected open space as well as substantial recreational facilities. Some of the preserved land is privately owned, but a significant amount of acreage is publicly owned and will be developed as a park. The historic Fall Hill mansion sits on a prominent hill overlooking Fredericksburg and the Rappahannock valley.

Opportunities

Most of the goals for the area relate to protecting the integrity of the natural areas when public recreational amenities are developed and maintained.

- Develop a City park accessible from Fall Hill Avenue that protects the natural areas on the uplands overlooking the Rappahannock River.
- Develop a riverside trail that maintains the natural and scenic qualities of the river, its floodplain, and wetlands.
- Protect environmentally sensitive lands through clustering of residential development.
- Protect historic sites such as the Fall Hill mansion and Civil War earthworks.
- Continue to improve the Sunshine Ball Park and develop additional recreational amenities, as feasible.
- Ensure that an extended Gateway Boulevard, between State Route 3 and Fall Hill Avenue, is included in all development plans for affected properties, since this facility will provide a critical north-south connector for vehicles and cyclists/pedestrians.



- Protect established residential neighborhoods from existing and proposed commercial development, through transitional uses and design standards that minimize adverse impacts.

Existing Land Use

The planning area is characterized by multi-family residential development along Fall Hill Avenue, very minor commercial development, and large tracts dedicated to both active and passive recreation.

Table 11-6. Land Use Summary for Planning Area 2.

Corridor	Development	Type of Use	Size
Fall Hill Avenue	Heritage Park	Residential	200 apartments
Fall Hill Avenue	Central Park Townhomes	Residential	264 townhouses
Fall Hill Avenue	Crestview	Residential	180 apartments
Fall Hill Avenue	Riverside Manor	Residential	189 townhomes
Fall Hill Avenue	Riverview Apartments	Residential	96 apartments
Fall Hill Avenue	River Walk	Residential	59 single-family detached homes
Fall Hill Avenue	Bragg Hill retail center	Commercial	Small storefronts

Environmental Factors

This planning area is characterized by highly erodible soils, moderate to steep slopes, and some wetlands. In 2003-2004, material dredged from the river during the Embrey Dam removal project was deposited on the uplands and reconfigured to serve as a base for the Sunshine Park recreational ball fields. The environmentally sensitive areas are primarily found along the Rappahannock River and the Rappahannock Canal, but Falls Quarry Run extends up into the planning area, just east of the interstate.

Table 11-7. Preservation Areas in Planning Area 2.

Name	Size	Description
Butler-Brayne Park	108 acres	Wooded uplands
Fall Hill	23 acres under State easement	Historic brick mansion, outbuildings, wooded uplands

Historic Resources

Planning Area 2 contains the brick mansion called Fall Hill (built c. 1779) and a collection of associated outbuildings. This high ground provided tactical advantages during the Civil War and a variety of Confederate earthworks are extant.

Table 11-8. Historic Resources in Planning Area 2.

Site Name	Period of Significance	Description	Ownership
Fall Hill mansion	Built c. 1779	Brick dwelling with outbuildings; Civil War earthworks	Private
Embrey Dam (site)	Built 1910, removed 2003	Concrete abutments	City
Crib dam (site)	Built 1850s, removed 2003	Stone abutments, canal lock, and spillway	City
Rappahannock Canal	Built 1830s	Canal, stone bridge abutment at Fall Hill Avenue	City
Confederate earthworks	Civil War	Gun pits and infantry trenches	Private

Land Use Potential

This planning area has a very limited number of sites that remain undeveloped. Some of the larger parcels are in City ownership and will be developed as parks. The other parcels are recommended to have residential uses of various densities.

Table 11-9. Land Use Potential in Planning Area 2.

Sub Planning Area	Size	Current Zoning	Recommended Land Use
2A	32 acres	R-2 Residential	Low Density Residential
2B	20 acres	R-2 Residential	Low Density Residential; Preservation
2C	13 acres	R-2 Residential	Low Density Residential
2D	5 acres	Commercial-Transitional	Medium density residential
2E	28 acres	R-2 Residential	Parkland

Sub Planning Area 2A – This 32 acre site is located north of the Central Park Townhouses (formerly Bragg Hill), adjacent to Interstate-95. Portions of the site are relatively flat, but there are also steep slopes where a small stream drains to the north. The proposed land use is Low Density Residential, but the difficult topography suggests that a planned development configuration could be considered.

Sub Planning Area 2B – This 20 acre parcel is divided by the Rappahannock Canal. The portion on the east side of the canal is low lying wooded ground that is also a floodplain. The topography west of the canal includes steep slopes. Access is from Fall Hill Avenue. The recommended land use is low density residential development, but a greater density could be considered in return for preservation of open space and sensitive environmental features (both

natural as well as historic). An improved Fall Hill Avenue, connecting to Mary Washington Boulevard, could also make this site attractive for medical related development.

Sub Planning Area 2C – A 13-acre parcel along the north side of Fall Hill Avenue has preservation easements on it, held by the Virginia Department of Historic Resources. The easement allows construction of no more than five single family homes. Access will be facilitated when Fall Hill Avenue is widened to a four-lane divided road, but shared ingress/egress will be required.

Sub Planning Area 2D – This five acre parcel is located just east of the Riverview Apartments and has frontage on Fall Hill Avenue. The property is recommended for medium density residential development.

Sub Planning Area 2E – The City of Fredericksburg owns this 28-acre tract on the south side of Fall Hill Avenue. Much of the site has been leveled with fill material to accommodate playing fields, but there are still steep slopes along a small stream that drains to the east. A portion of this land will be used as right-of-way for the Fall Hill Avenue widening project. The recommended use of the remaining land is for public recreation.

Infrastructure

Roads

Fall Hill Avenue – The Virginia Department of Transportation is widening this two lane route to be a four lane divided road, with sidewalks on its south side and a multi-use bicycle/foot trail on its north side. The expanded Fall Hill Avenue will not cross the Rappahannock Canal into the Normandy Village neighborhood. Instead, Mary Washington Boulevard will be extended, as a four lane divided road, along the west side of the Rappahannock Canal, to connect the widened Fall Hill Avenue to the U.S. Route 1 Bypass. The Fall Hill Avenue widening project will also include a new bridge over Interstate-95, which will provide for future interstate improvements.

High Occupancy Vehicle/Toll Lanes on Interstate-95 – The HOV/HOT lanes under construction in Northern Virginia will be extended as far as Exit 126, south of Fredericksburg. This project is funded through the Virginia Department of Transportation and anticipated to be under construction between 2021 and 2025.

Gateway Boulevard (extended) – A four lane divided road, with sidewalks on one side and a multi-use bicycle/foot trail on the other, will extend from State Route 3 to Fall Hill Avenue. This facility is to be privately funded by those who will develop the intervening land.

Trails

Embrey Dam/Rappahannock Canal Trail – In addition to the bicycle/foot trail that will be constructed along a widened Fall Hill Avenue, there is a trail along the Rappahannock Canal, north of Fall Hill Avenue that is called the Embrey Dam/Rappahannock Canal Trail. This trail has a natural surface and courses along the Rappahannock River into Celebrate Virginia. When all of the required right-of-way has been acquired, this trail will be extended farther upstream, to eventually link to Motts Run Park.

Rappahannock Canal/Fall Hill Avenue Bridge – A new bridge has been installed to carry Fall Hill Avenue across the Rappahannock Canal. The design allows the Canal Trail to pass underneath the roadway and there are two pedestrian bridges across the Canal, which removes all at-grade crossings for cyclists and pedestrians.

Canal Path – There will be only limited pedestrian facilities along Mary Washington Boulevard when this roadway is widened. The main pedestrian avenue along that route already exists along the Rappahannock Canal Trail.

North-South Trail – A north-south multi-use trail is needed east of Interstate-95, which will be accommodated through the design of Gateway Boulevard (extended). It will connect to the new trail along Fall Hill Avenue.

Traffic Calming

There is one traffic calming feature in this planning area and one more planned. The existing feature is the new Fall Hill Avenue/Canal Bridge. When Fall Hill Avenue west of this bridge is improved to a four lane roadway, this two lane bridge will reduce through-traffic into the Normandy Village neighborhood. The second feature is a planned roundabout west of the new bridge, where Fall Hill Avenue will connect to an extended Mary Washington Boulevard.

Table 11-10. Transportation Summary for Planning Area 2.

Project	Location	Description
Fall Hill Avenue	Gordon W. Shelton Blvd. to Mary Washington Blvd. (extended)	Improve the existing road to four lanes, divided, with bicycle/pedestrian facilities
Fall Hill Avenue Bridge	Fall Hill Avenue and Interstate-95	Replace entire bridge

Interstate-95 HOV/HOT Lanes, Design and Construction	Garrisonville Road (Stafford) to Exit 126 (Spotsylvania)	Construct high occupancy vehicle/toll lanes
Gateway Boulevard (extended)	State Route 3 to Fall Hill Avenue	Construct a new four lane divided road with bicycle/foot trail and sidewalk

Land Use Planning Area 3:

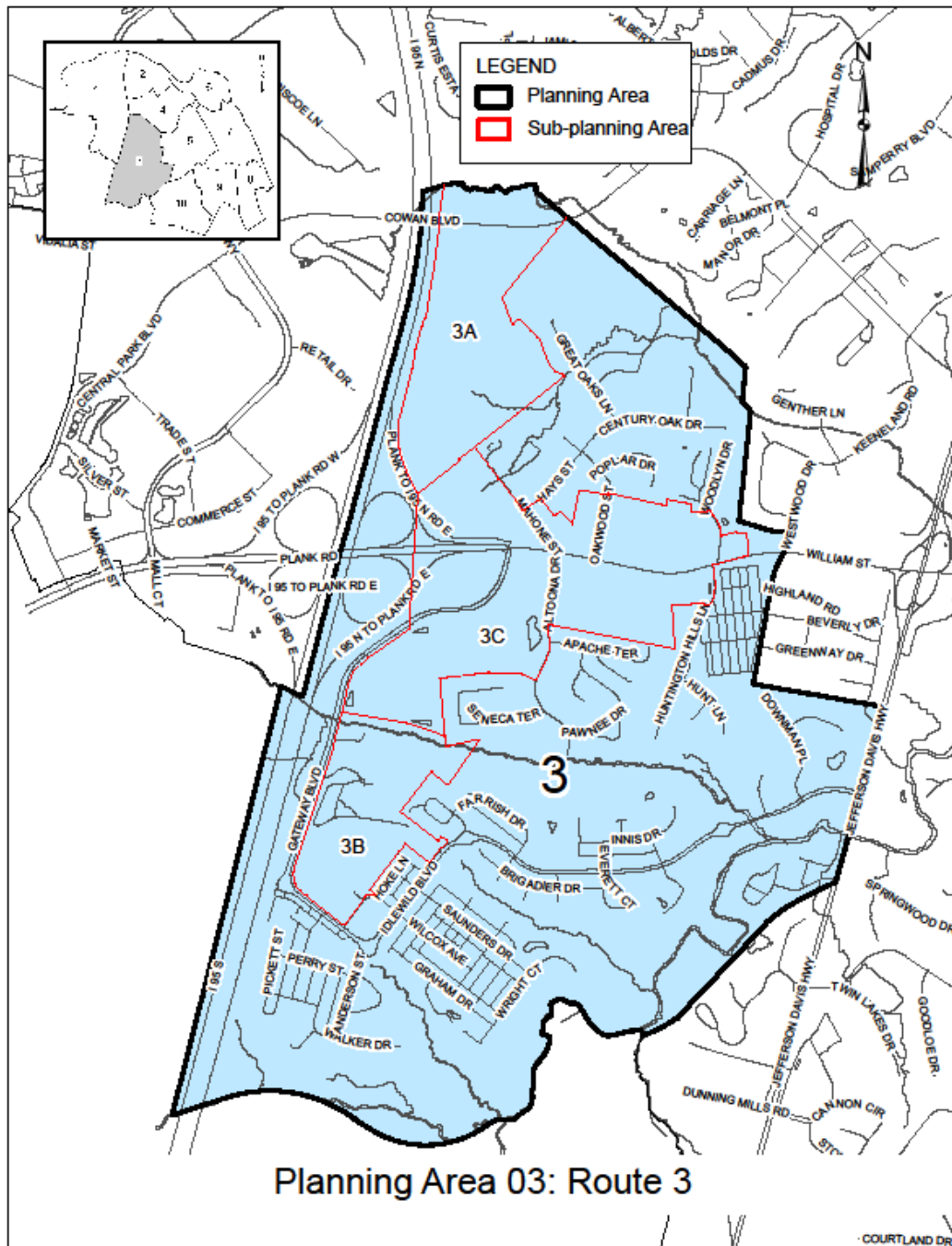
Plank Road/Route 3

Setting

Planning Area 3 (see Map 11-4) is bounded by the City/County line on the south, Interstate-95 on the west, extends to the U.S. Route 1 Bypass on the east, and up into the Smith Run/Cowan Boulevard area to the north. The eastern half of the Interstate-95/State Route 3 interchange is located within this planning area and there are a variety of commercial uses along the Route 3 corridor. South of State Route 3 are the Altoona and Idlewild neighborhoods, bounded on the south by the Virginia Central Railway Trail, which is a multi-use path for bicycle/foot traffic that connects these neighborhoods to downtown Fredericksburg. North of State Route 3 are more residential neighborhoods as well as an undeveloped tract of nearly 80 acres.

Opportunities

- Promote mixed-use development along the State Route 3/Plank Road corridor.
- Ensure that an extended Gateway Boulevard, between State Route 3 and Cowan Boulevard, is included in all development plans for affected properties, since this facility will provide a critical north-south connector.
- Protect established residential neighborhoods from existing and proposed commercial development, through transitional uses and design standards that reduce adverse impacts.
- Protect historic sites, including Civil War winter encampments, the historic Downman House (Idlewild), and battlefield terrain on City owned lands.
- Support redevelopment of outdated shopping centers.
- Sell the historic Downman House (Idlewild) with up to 14 acres of City-owned property to a buyer who will adaptively reuse the building, while preserving its exterior features.
- Plant more trees in the newly developed subdivisions to help mitigate stormwater runoff and to help with air quality issues.



Existing Land Use

This planning area includes the eastern half of the Route 3/Interstate-95 interchange, which concentrates development along Route 3 and Gateway Boulevard. Areas beyond the commercial corridors are usually residential in nature.

Table 11-11. Land Use Summary for Planning Area 3.

Corridor	Development	Type of Use	Size
State Route 3	Westwood Shopping Center	Commercial	101,000 square feet
State Route 3	Westwood Office Park	Commercial	67,100 square feet
State Route 3	Westwood Village Center	Commercial	29,214 square feet
State Route 3	Greenbrier Shopping Center	Commercial	162,000 square feet
State Route 3	Gateway Village	Commercial	215,000 square feet
State Route 3 – Gateway Boulevard	Home Depot	Commercial	135,000 square feet
State Route 3	River Woods Apartments	Residential	187 units
State Route 3	Westwood Commons	Residential	42 condominiums
State Route 3	Oakwood Terrace	Residential	30 single family homes
State Route 3	Great Oaks	Residential	46 single family homes
State Route 3	Altoona	Residential	100 single family homes

State Route 3	Huntington Hills	Residential	32 single family homes
State Route 3 – Gateway Boulevard	Idlewild	Residential	785 single family homes and townhouses
U.S. Route 1 Bypass	Estates at Idlewild	Residential	48 single family homes
U.S. Route 1 Bypass	Kings Mill	Residential	24 townhouses
U.S. Route 1 Bypass	Kendalwood Apartments	Residential	200 apartments

Environmental Factors

Hazel Run forms the southern boundary of this planning area, which is also the south City limit. Its headwaters are in Spotsylvania County and inadequate stormwater management outside the City limits has increased flooding and erosion along this waterway. Appropriate erosion and sediment control and stormwater management are needed upstream, to protect the environmental quality of this waterway, which flows through an attractive area of steep slopes and rock outcroppings that are scenic features of the Virginia Central Railway Trail.

Just south of Route 3/William Street is North Hazel Run, which also has inadequate stormwater management upstream. It too is an undeveloped natural corridor with scenic values, but also drainage issues.

North of Route 3/William Street, Smith Run drains a large watershed and also suffers from stream bank erosion. A large regional stormwater pond has been established on this stream, but continued implementation of best management practices and low impact development are needed to reduce the risk of flooding, with its attendant damage.

Table 11-12. Preservation Areas within Planning Area 3.

Name	Size	Description
Hazel Run/Virginia Central	151 acres (City-owned: 125 in	Natural stream valley; historic

Railway corridor/Downman House (Idlewild)	City; 26 in Spotsylvania County)	railway, battlefield, Confederate encampment, historic house
North Hazel Run	12 acres (City-owned)	Natural stream valley
Smith Run battlefield	11 acres (City-owned)	Natural area; battlefield

Historic Resources

No historic dwellings have fully survived in this planning area. Instead, there is a historic railway bed that has become the Virginia Central Railway Trail, considerable battlefield terrain from May 4, 1863, and an extensive Confederate winter encampment. Of several historic homes that once dotted this area, only the fire-damaged ante-bellum Downman House (Idlewild) remains. The National Park Service interprets its Fredericksburg holdings as the battleground of December 13, 1862, but a second battle of Fredericksburg occurred on May 3, 1863 across this same ground and additional fighting took place in this planning area on May 4. The City of Fredericksburg has begun to interpret the events of the second battle of Fredericksburg within its trail system and this effort will continue.

Table 11-13. Historic Resources in Planning Area 3.

Site Name	Period of Significance	Description	Ownership
Virginia Central Railway	Ante-bellum	Graded railway bed with stone culverts	City
Downman House (Idlewild)	Ante-bellum, Civil War	Brick Gothic Revival mansion, built 1859; Lee's HQ on 4 May 63	City
Confederate winter encampment	Civil War	Hut holes near Hazel Run	City
Smith Run battlefield	Civil War	Representative site	City

Land Use Potential

This planning area contains several undeveloped parcels, including a City-owned property south of Route 3/William Street and a large private tract north of that roadway. In addition, some of the shopping centers along Route 3 have been identified as having strong redevelopment potential.

Table 11-14. Land Use Potential in Planning Area 3.

Sub Planning Area	Acres	Current Zoning	Recommended Land Use
3A	78	R-2 Residential	Planned Development-Mixed Use
3B	34	Planned Development – Residential	Planned Development–Mixed Use
3C	3,000 linear feet of the State Route 3/Plank Road Corridor	Commercial-Highway, Commercial-Shopping Center, Commercial-Transitional/Office, R-2 Residential	Commercial-General, Planned Development-Mixed Use

Sub Planning Area 3A – This 78-acre site is located adjacent to Interstate-95, between Cowan Boulevard and State Route 3. Development will require an extension of Gateway Boulevard, from State Route 3 to at least Cowan Boulevard, although the full road project is to connect to Fall Hill Avenue. A mixed-use development is recommended, to be made compatible with the adjoining residential neighborhoods.

Sub Planning Area 3B – The City of Fredericksburg owns 34 acres that includes the fire-damaged Downman House (Idlewild). This Gothic-Revival mansion (built in 1859) sits atop a hill and is visible from as far away as Route 3. There are three outbuildings. A fire in 2003 gutted

the main house, but the intact brick walls are braced with steel supports. Most of the site is flat, wooded terrain that has excellent access and is readily developed.

Sub Planning Area 3C (Route 3/Plank Road Corridor) – State Route 3 was historically known as Plank Road and this name still applies to this roadway within Planning Area 3. East of this planning area, Route 3 becomes William Street. The current development is visually chaotic, but implementation of better sign regulations has systematically improved its appearance. Consolidated curb cuts have increased overall safety. Establishing a Planned Development Mixed-Use zoning district along this corridor will provide a more cohesive development pattern than the current collection of three different commercial zoning districts and a residential district.

Infrastructure

Roads

Cowan Boulevard and State Route 3/Plank Road provide east-west links across Interstate-95. Gateway Boulevard and Idlewild Boulevard course through the Idlewild neighborhood, providing access at Route 3 as well as at the U.S. Route 1 Bypass. A new roadway will extend Gateway Boulevard from Route 3 to Cowan Boulevard and continue to Fall Hill Avenue. This new facility will be a four lane, divided road, with a bicycle/foot trail on one side and a sidewalk on the other.

High Occupancy Vehicle/Toll Lanes on Interstate-95 – The HOV/HOT lanes under construction in Northern Virginia will be extended as far south as Exit 126, south of Fredericksburg. This project is funded through the Virginia Department of Transportation and anticipated to be under construction between 2021 and 2025.

Trails

The Virginia Central Railway Trail extends from Idlewild to downtown Fredericksburg. The extended Gateway Boulevard will include a 10-foot wide bicycle/pedestrian trail in its design and this north-south link will eventually cross State Route 3 and link to the Virginia Central Railway Trail.

Traffic Calming

Gateway Boulevard and Idlewild Boulevard have a series of four traffic circles that are meant to discourage excessive speeds between State Route 3 and the U.S. Route 1 Bypass. An extended

Gateway Boulevard has not yet been designed, but similar facilities will be included to ensure the safety of those who will work and reside in the proposed mixed-use developments along that roadway.

Table 11-15. Transportation Summary for Planning Area 3.

Project	Location	Description
Gateway Boulevard (extended)	Between Route 3/Plank Road and Cowan Boulevard	Portion of a four lane divided roadway that will extend from Route 3/Plank Road to Fall Hill Avenue
Interstate-95 HOV/HOT Lanes	Garrisonville Road (Stafford) to Exit 126 (Spotsylvania)	Construct high occupancy vehicle/toll lanes
North-South Trail	Virginia Central Railway Trail to Cowan Boulevard	Portion of a multi-use bicycle/foot trail that will extend from Fall Hill Avenue to the VCR Trail

Land Use Planning Area 4:

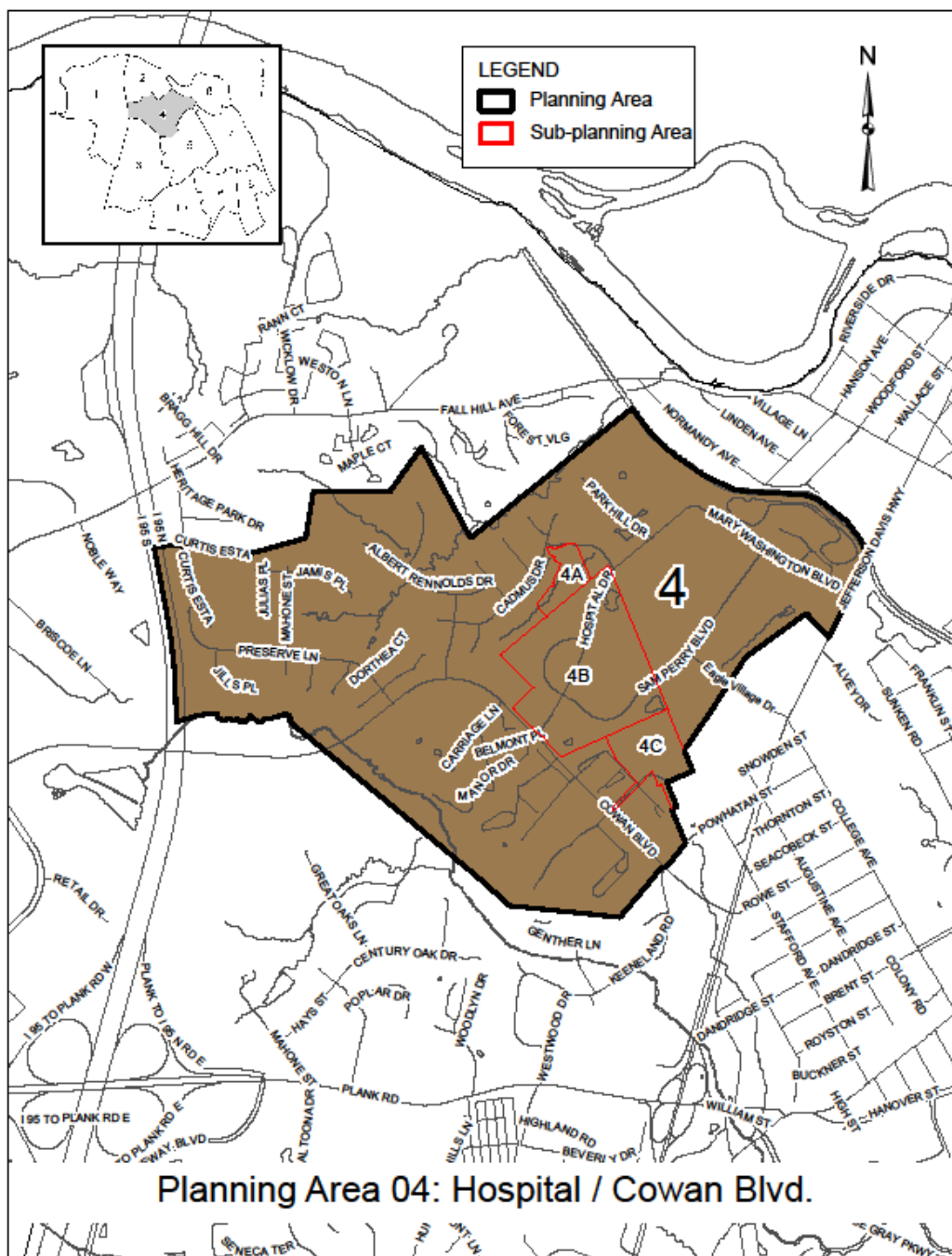
Hospital/Cowan Boulevard

Setting

Planning Area 4 (Map 11-5) extends from Interstate-95 to the U.S. Route 1 Bypass (Jefferson Davis Highway). The MWH Medicorp/Mary Washington Hospital medical campus is a substantial presence, with access from the U.S. Route 1 Bypass and Cowan Boulevard. When Fall Hill Avenue is widened from a two-lane to a four-lane road, it will be linked to Mary Washington Boulevard, providing another access route to the medical campus. The remainder of the Cowan Boulevard corridor is primarily residential, with a small commercial component.

Opportunities

- Support the continued development of the MWH Medicorp/Mary Washington Hospital medical campus and surrounding supportive services.
- Protect the integrity of historic resources, including Civil War sites, and establish a series of wayside exhibit panels along the Cowan Boulevard multi-use trail.
- Preserve the environmental integrity of the Smith Run valley.
- Preserve the aquatic resources and adjacent natural lands of the Rappahannock Canal, Snowden Pond, Snowden Marsh, and other wetland resources.
- Plant substantial numbers of trees along Cowan Boulevard, to calm traffic and to provide shade along existing trails and sidewalks.
- Protect established residential neighborhoods from existing and proposed commercial development, through transitional uses and design standards that minimize adverse impacts.



Existing Land Use

This planning area includes significant multi-family residential development along Cowan Boulevard as well as the Mary Washington Hospital campus. Mary Washington Hospital is a full service facility that serves the entire region. The hospital is the largest employer in the region.

Table 11-16. Land Use Summary for Planning Area 4.

Corridor	Development	Type of Use	Size
U.S. Route 1 Bypass	Snowden Office Park	Commercial	48,000 square feet
U.S. Route 1 Bypass	Snowden Executive Center	Commercial	65,000 square feet
U.S. Route 1 Bypass	The Park at Snowden	Commercial	100,000 square feet
Mary Washington Boulevard	Mary Washington Hospital	Medical	437 bed hospital and related medical buildings
Cowan Boulevard	Mary Washington Healthcare campus	Medical	Various
Cowan Boulevard	Pratt Medical Center	Medical	15,440 square feet
Cowan Boulevard	Hugh Mercer School	Government	
Cowan Boulevard	Police Station	Government	
Cowan Boulevard	Snowden Village	Residential	254 apartments
Cowan Boulevard	Monticello Apts.	Residential	263 apartments
Cowan Boulevard	Belmont at Cowan Place	Residential	300 apartments
Cowan Boulevard	Madonna House	Residential	260 apartments
Cowan Boulevard	Evergreens at Smith Run	Residential	130 apartments

Cowan Boulevard	Hills at Snowden	Residential	78 single family homes
Cowan Boulevard	Preserve at Smith Run	Residential	133 single family homes; 50 townhouses
Cowan Boulevard	Cowan Center	Commercial	31,680 square feet

Environmental Factors

This planning area is characterized by highly erodible soils, moderate to steep slopes, highly permeable soils, the Rappahannock Canal, and several wetlands. Environmentally sensitive areas include the Rappahannock Canal, Snowden Pond, Snowden Marsh, and several unnamed tributaries and ponds. The Smith Run valley is an area of mature woodlands that extends across several private properties where residential apartments front on Cowan Boulevard. When these properties were developed, the City allowed the existing densities in return for dedicated open space along the stream. This protected natural area abuts City properties that are similarly protected.

Table 11-17. Preservation Areas in Planning Area 4.

Name	Size	Description
Snowden Marsh and Snowden Pond	6.6 acres	Sensitive natural areas
Zig-zag trenches	5.0 acres	Confederate earthworks
Hugh Mercer School/Police Station easement	4.5 acres	Historic area related to Smith Run battlefield, wooded slope
Smith Run valley	15 acres (approx.)	Dedicated open space (woods) on private property (apt. bldgs. on Cowan Blvd.)

Historic Resources

Planning Area 4 contains a variety of Confederate earthworks as well as the historic Snowden mansion. This Federal period dwelling, originally known as Stansbury, is a Greek Revival building on a rise overlooking the Rappahannock Canal, just east of Mary Washington Hospital. The original structure, built c. 1815, partially burned and was rebuilt, in 1926, replicating the original dwelling. Snowden currently houses the executive offices of Mary Washington Healthcare.

Table 11-18. Historic Resources in Planning Area 4.

Site Name	Period of Significance	Description	Ownership
Zig zag trenches	Civil War	Distinctive Confederate earthworks	City
Huger's Battery	Civil War	Earthen double gun pit	Mary Washington Healthcare
Snowden (Stansbury)	c. 1815 dwelling; rebuilt 1926	Greek Revival brick mansion	Mary Washington Healthcare

Land Use Potential

This planning area is characterized by a substantial medical campus as well as significant residential development along Cowan Boulevard. The Mary Washington Healthcare medical campus continues to grow and is already well served by Cowan Boulevard, Mary Washington Boulevard, Sam Perry Boulevard, and Hospital Drive. The terrain is relatively flat on the plateau where Cowan Boulevard is located, but drops off to the northeast. Continued development will include additional offices and medical related facilities.

Table 11-19. Land Use Potential in Planning Area 4.

Sub Planning Areas	Acres	Current Zoning	Recommended Land Use
4A	4.76 acres	R-8, Residential	Commercial-Transitional/Office
4B	Various parcels in medical campus	Commercial Transitional	Institutional
4C	10.55 acres	R-16, Residential	Commercial-Transitional/Office, High Density Residential

Sub Planning Area 4A – This 4.76-acre parcel is adjacent to the Mary Washington Healthcare medical campus and zoned for residential uses. It is bisected by a stream valley, with steep slopes and will require a substantial amount of earth moving before any development is possible. There is a Confederate gun pit and a trench on a hill at the western side of the parcel, but there are no legal protections in place for these historic features.

Sub Planning Area 4B – The Mary Washington Healthcare medical campus is a 46-acre tract that is substantially developed. There are still several parcels, however, that remain vacant and which will be developed as offices/medical facilities.

Sub Planning Area 4C – This 10.55-acre parcel is behind the Monticello Apartment complex, with access is to Cowan Boulevard.

Infrastructure

Roads

Mary Washington Boulevard (extended) – This four-lane divided roadway provides access to Mary Washington Hospital from the U.S. Route 1 Bypass (Jefferson Davis Highway). It will be extended as a four-lane divided road to connect with Fall Hill Avenue, west of the Rappahannock Canal.

Gateway Boulevard (extended) – A new four-lane divided road is planned to extend from State Route 3 to Fall Hill Avenue. A portion of this roadway has been built as Mahone Street, in the neighborhood known as the Preserve at Smith Run. This two lane street will eventually be two lanes of a four lane facility, with bicycle/pedestrian facilities along either side.

High Occupancy Vehicle/Toll Lanes on Interstate-95 – The HOV/HOT lanes under construction in Northern Virginia will be extended as far as Exit 126, south of Fredericksburg. This project is funded through the Virginia Department of Transportation and anticipated to be under construction between 2021 and 2025.

Trails

There are three trails in this planning area. Cowan Boulevard includes a bicycle/foot trail, the Rappahannock Canal is a bicycle/foot route, and Sam Perry Boulevard connects these two routes with its own pedestrian links.

Traffic Calming

There is a traffic circle where Sam Perry Boulevard and Mary Washington Boulevard intersect, near Cowan Boulevard.

Table 11-20. Transportation Summary for Planning Area 4.

Project	Location	Description
Mary Washington Boulevard extension	Between Mary Washington Blvd. (existing) and improved Fall Hill Avenue	Four-lane divided road, to connect Mary Washington Blvd. to Fall Hill Avenue
Gateway Boulevard (extended)	Between State Route 3 and Fall Hill Avenue	Four-lane divided road, with bicycle/pedestrian facilities
Interstate-95 HOV/HOT Lanes	Garrisonville Road (Stafford) to Exit 126 (Spotsylvania)	Construct high occupancy vehicle/toll lanes

Land Use Planning Area 5:

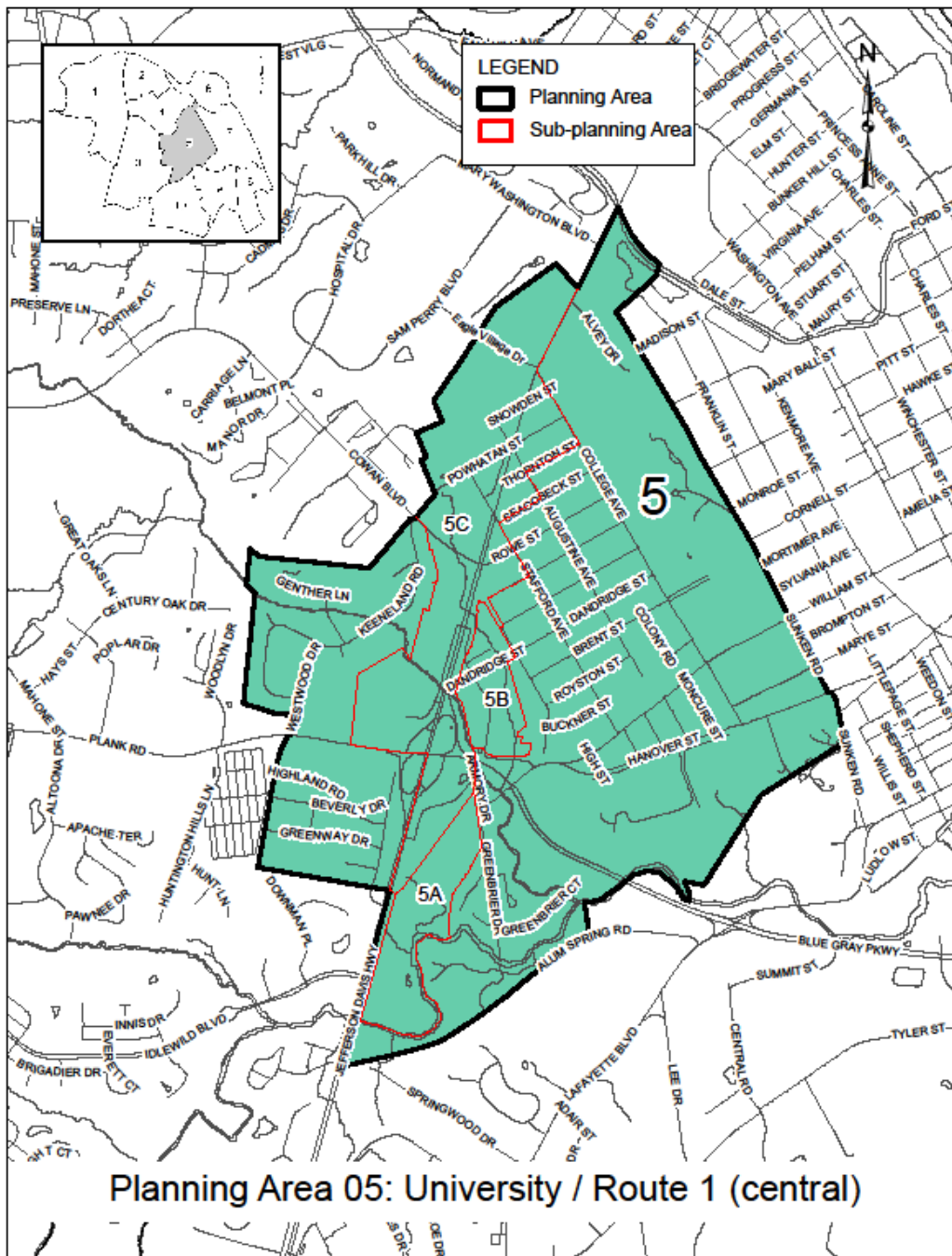
University/Route 1 (central)

Physical Description

Planning Area 5 (Map 11-6) is on top of one of the high ground to the west of the older sections of Fredericksburg. Smith Run cuts through the ground from the northwest and joins Hazel Run on the southern boundary of the planning area. The area also includes a significant portion of the U.S. Route 1 Bypass (Jefferson Davis Highway) and William Street corridors, with both commercial and residential uses along each. The University of Mary Washington occupies the plateau overlooking the City and is flanked by residential neighborhoods east and west of the campus. On the west side of the U.S. Route 1 Bypass, the University, through its related foundation, has redeveloped a shopping center into a mixed-use center known as Eagle Village and connected this commercial/residential area to the main campus by a pedestrian bridge over the U.S. Route 1 Bypass.

Goals

- Promote mixed-use development along the U.S. Route 1 Bypass and William Street corridors.
- Protect established residential neighborhoods from existing and proposed commercial development, through transitional uses and design standards that minimize adverse impacts.
- Continue to work with the University of Mary Washington to reduce adverse impacts to surrounding neighborhoods, such as under-age drinking, parking impacts and overcrowded rental units.
- Protect environmentally sensitive areas, including College Marsh and the Rappahannock Canal and enhance public access.
- Engage in an aggressive landscaping program along the U.S. Route 1 Bypass, planting trees where they will not interfere with lines of sight and installing lower level vegetation where visibility is critical to safety and commercial activity.



Map 11-6. Planning Area 5.

Existing Land Use

This planning area includes the Fredericksburg campus of the University of Mary Washington. The traditional street grid that characterizes downtown Fredericksburg extends into the neighborhoods called College Terrace and College Heights. The U.S. Route 1 Bypass (Jefferson Davis Highway) cuts through this planning area and provides a break between the traditional grid pattern and the less organized street pattern of suburban development west of the Bypass.

Table 11-21. Land Use Summary for Planning Area 5.

Corridor	Development Name	Type	Size
U.S. Route 1 Bypass	Various	Commercial	Individual parcels
U.S. Route 1 Bypass	Eagle Village	Commercial and Institutional	22+ acres
U.S. Route 1, Bypass	Stratford Square	Residential	121 apartments
College Ave./Hanover Street	College Heights	Residential	400+ single family homes
College Ave./Hanover Street	University of Mary Washington	Institutional	Athletic facilities and fields
Spotsylvania Avenue	Mobile Home Park	Residential	30+ mobile homes
Blue and Gray Parkway	National Guard Armory	Institutional	6.7 acres
Blue and Gray Parkway	Greenbrier	Residential	258 apartments; 50 condominiums

Environmental Factors

Stormwater runoff from the University of Mary Washington and College Heights is primarily to the east, toward the Kenmore drainage. The Kenmore flume has been extensively improved to handle this runoff and more. Drainage to the west and south is toward Smith Run and Hazel

Run. Environmentally sensitive areas include Gayles Pond and College Marsh, adjacent to the Rappahannock Canal, and the Smith Run and Hazel Run stream valleys.

Table 11-22. Preservation Areas in Planning Area 5.

Name	Size	Description
College Marsh/College Pond	5 acres (approximately)	Natural area
Alum Springs Park	34 acres	Natural area, playground, picnic area, historic sites

Historic Resources

Historic resources in this planning area are largely under State ownership. The University of Mary Washington owns the ante-bellum house called Brompton, which is used as the residence of the University president. There are also some remnants of Confederate earthworks on the University campus. Much of this planning area was a Civil War battleground, contested during the December 13, 1862 as well as the May 3, 1863 battles of Fredericksburg.

Table 11-23. Historic Resources in Planning Area 5.

Site	Period of Significance	Description	Ownership
Brompton	Ante-bellum, Civil War	1830s brick mansion	University of Mary Washington
Battery site on UMW campus	Civil War	Earthen gun pit and trench	University of Mary Washington
Rose Hill	Ante-bellum, Civil War	1852 brick mansion with c. 1900 addition	Private

Land Use Potential

This planning area has been extensively developed and is beginning to see extensive redevelopment. The College Heights and College Terrace neighborhoods are attractive and

accessible, due to their traditional street grid. College Terrace is not going to change much, except for a limited amount of infill development and additions to homes. College Terrace will also be considerably enhanced by a systematic reclamation of the existing alleys, which will relieve on-street parking and keep service functions at the rear of properties. College Heights, on the other hand, is more subject to the influences of the University of Mary Washington and of the U.S. Route 1 Bypass. As redevelopment occurs in the College Heights area, the highly functional street grid will need to be respected and kept intact.

Table 11-24. Land Use Potential in Planning Area 5.

Sub Planning Area	Acres	Current Zoning	Recommended Land Use
5A	34.7	R-2, Residential	Low Density Residential (4 units/acre)
5B	30 +	Commercial-Transitional, R-4 Residential, and Mobile Home	Commercial-Transitional/Office; Low Density Residential (4 units/acre)
5C	1.3 miles of the U.S. Route 1 Bypass Corridor	Planned Development-Medical Campus, Commercial-Highway, Commercial-Shopping Center, Commercial-Transitional/Office, R-12 Residential, Residential-Mobile Home	Commercial-General; Commercial-Transitional/Office; Institutional

Sub Planning Area 5A – This 34.7-acre tract is controlled by the University of Mary Washington and has frontage on the U.S. Route 1 Bypass as well as Greenbrier Drive. Potential uses include student housing, but there could also be a potential mix of commercial and residential uses, as has occurred at Eagle Village. This level of development could provide much needed student

housing and allow the College Heights neighborhood to recover from excessive numbers of rental units and reestablish itself as an owner-occupied community.

Sub Planning Area 5B – The northeast quadrant of the intersection of State Route 3 and U.S. Route 1 Bypass has a variety of land uses, but also has the potential to be redeveloped at a higher intensity. Potential uses include student housing as well as a mix of commercial and residential uses, as has occurred at Eagle Village. The basis of this level of development would be to provide much needed student housing and allow the College Heights neighborhood to recover from excessive numbers of rental units. This area is directly adjacent to College Heights, especially along Rappahannock Avenue. Redevelopment plans would need to be designed to become a positive contribution to that neighborhood and help it to reestablish itself as an owner-occupied community.

Sub Planning Area 5C (U.S. Route 1 Bypass Corridor) – The U.S. Route 1 Bypass/Jefferson Davis Highway became functional when a new Falmouth Bridge was completed in the 1940s, providing a way for travelers to avoid driving through downtown Fredericksburg when they did not intend to stop there. Commercial development followed the new traffic pattern and over the years a great variety of uses have gravitated to that roadway. A more cohesive commercial corridor could provide appropriate transitional land uses between the commercial activity along the highway and the nearby residential neighborhoods.

Infrastructure

Roads

The Blue and Gray Parkway has effectively diverted a significant amount of through traffic from William Street. Additional improvements are related the U.S. Route 1 Bypass and portions of William Street. There are planned improvements to the U.S. Route 1 Bypass/State Route 3 interchange, which would include related improvements to both roadways.

Trails

On the east side of the U.S. Route 1 Bypass, this planning area is interconnected by a comprehensive network of sidewalks that extends to downtown Fredericksburg. In the areas west of the U.S. Route 1 Bypass, there are sidewalks in selected areas, such as around Mary Washington Hospital, but most of the pedestrian ways are multi-use trails, such as the Canal Trail and the Cowan Boulevard Trail. Pedestrian connections across the U.S. Route 1 Bypass occur at grade at Cowan Boulevard and College Avenue. Grade separated crossings occur at the Rappahannock Canal (underpass) and at College Avenue (bridge). The Virginia Central

Railway Trail courses through this planning area, crossing the U.S. Route 1 Bypass at grade. A bridge is proposed to be established there to enhance user safety.

Traffic Calming

College Avenue is a busy connector, but densely parked vehicles on either side of the roadway serves a traffic calming function by narrowing the perceived travel lanes. There are two additional routes in this planning area that would benefit from traffic calming devices - Stafford Avenue and Keeneland Road/Westwood Drive. Earlier traffic calming devices on Stafford Avenue were not designed well and proved inadequate. These have been removed. Properly designed traffic calming devices are still needed.

Table 11-25. Transportation Summary for Planning Area 5.

Project	Location	Description
U.S. Route 1 Bypass bridge	Rappahannock Canal	Replace bridge and improve bicycle/pedestrian facilities
U.S. Route 1 Bypass bridge	Hazel Run	Replace bridge
U.S. Route 1 Bypass bridge	State Route 3 interchange	Replace interchange bridge (no added capacity)
William Street	Between Blue and Gray Pkwy. And Gateway Boulevard	Widen road to six lanes, with bicycle/pedestrian facilities
Intersection improvements	U.S. Route 1 Bypass and Augustine Avenue	Improve intersection for efficiency and safety; in partnership with Eagle Village
Traffic calming	Stafford Avenue, Westwood Dr./Keeneland Rd.	Install traffic calming devices
VCR Trail bridge	U.S. Route 1 Bypass	Construct bicycle/pedestrian bridge over highway

Land Use Planning Area 6:

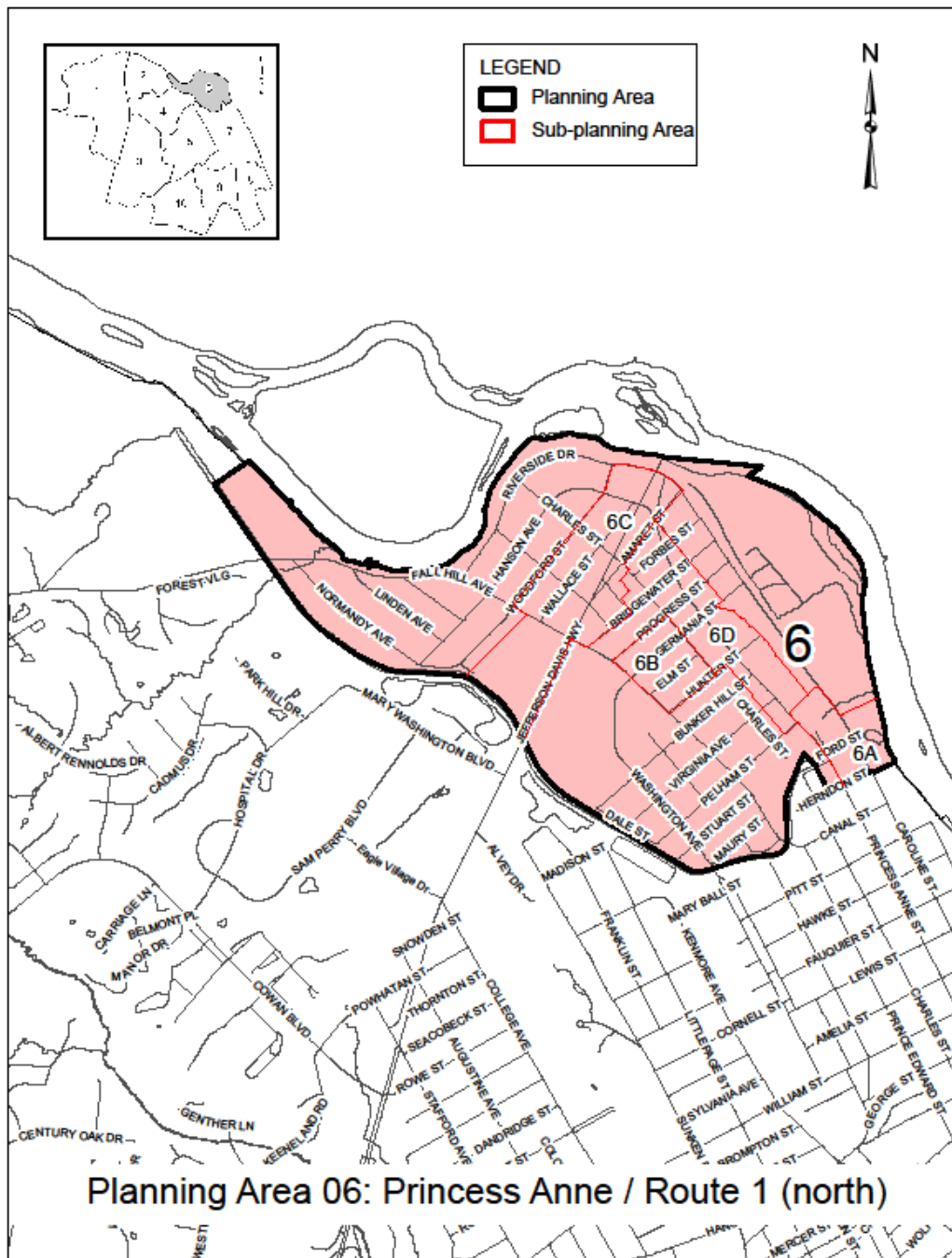
Princess Anne Street/Route 1 (north)

Setting

Planning Area 6 (Map 11-7) is bounded almost entirely by the Rappahannock River and the Rappahannock Canal. It includes the residential neighborhoods north of the downtown business district and is served by Princess Anne Street and the U.S. Route 1 Bypass (Jefferson Davis Highway). A traditional street grid, with sidewalks, prevails east of the U.S. Route 1 Bypass, but the neighborhoods west of the Bypass consist of longer blocks, although still with sidewalks.

Opportunities

- Support redevelopment of the Mill District area, including adaptive reuse of the Embrey Power Station and other historic mills.
- Promote increased development along the U.S. Route 1 Bypass and Princess Anne Street corridors.
- Protect established residential neighborhoods from existing and proposed commercial development, through transitional uses and design standards that minimize adverse impacts.
- Continue to implement public improvements of the Princess Anne Street corridor in partnership with the Virginia Department of Transportation.
- Support recreational uses along the Rappahannock River that are environmentally sensitive and which will not adversely impact residential neighborhoods.
- Improve the drainage in Old Mill Park by addressing the culvert at the park entryway that blocks the natural flow of stormwater and sends it across the park itself, causing erosion.
- Enhance the interpretation and preservation of historic resources along Princess Anne Street and along the river and canals.



Map 11-7. Planning Area 6.

Existing Land Use

This planning area reflects the development pattern related to the 1940s highway (the U.S. Route 1 Bypass) that diverted through-traffic around Fredericksburg's central business district. Princess Anne Street, which had been the main north-south highway, remained the U.S. Route 1 Business corridor. Residential neighborhoods extending west from the original town reflect the traditional street grid of the original 1728 town layout, but the neighborhoods west of the U.S. Route 1 Bypass begin to show the more open and non-linear streets of the emerging post-World War II suburban development.

Table 11-26. Land Use Summary for Planning Area 6.

Corridor	Development	Type	Size
U.S. Route 1 Bypass	Fredericksburg Shopping Center	Commercial	94,000 square feet
U.S. Route 1 Bypass	Various	Commercial	Individual parcels
Princess Anne Street	Elwood City/Bunker Hill/Brulle	Residential	Individual parcels
Princess Anne Street	Various	Commercial	Individual parcels
Wallace and Woodford Streets	Various	Commercial/Offices	Individual parcels
Fall Hill Avenue	James Monroe High School	Governmental	28 acres
Fall Hill Avenue	Elmhurst Subdivision	Residential	Individual parcels
Fall Hill Avenue	Normandy Village	Residential	Individual parcels
Fall Hill Avenue	Fairgrounds Subdivision	Residential	Individual parcels
Fall Hill Avenue	Rappahannock Outdoor Educational Center	Commercial	12 acres

Environmental Factors

Much of this planning area is adjacent to the Rappahannock River, but roads and development are at an elevation above flood levels while the floodplain remains undeveloped except as a park, which allows it to maintain its natural function to absorb river flooding. The Rappahannock Canal is also considered an environmentally sensitive area, even though it is a man-made feature.

The area near the Thornton's Mill site, off Riverside Drive, has the potential for concerted study and interpretation. The channel between the Fredericksburg shore and a small island was the entrance to a raceway that once powered Thornton's Mill. In the nineteenth century, this channel was blocked with a dam to feed water into Fredericksburg's lower canal and power a series of mills. In 1907, the dam and the gate to the canal were reconstructed in concrete, but by then hydroelectricity had begun to supplant hydromechanical power. A whitewater park has been proposed for this area, to take advantage of the natural fall of the river. Such a park could be established by cutting the 1907 dam, to reestablish the whitewater channel. The Thornton's Mill site, however, is nearby and would need to be fully protected.

Table 11-27. Preservation Areas in Planning Area 6.

Name	Size	Description
Old Mill Park	60 acres	Recreational area, historic sites
Riverside Drive Park	13 acres	Recreational corridor, historic sites
Rappahannock Canal	29 acres (approx.) within Planning Area 5	Multi-use trail, historic waterway

Historic Resources

Planning Area 5 includes the Old Mill Historic District and two canals that powered local water-powered industries. The upper canal, called the Rappahannock Canal, still carries water, while the lower canal (unnamed) is dry. This lower canal, however, receives significant amounts of

stormwater and is causing erosion within Old Mill Park. Corrective action is needed at the culvert at the park entryway.

Table 11-28. Historic Resources in Planning Area 6.

Site Name	Period of Significance	Description	Ownership
Old Mill Historic District	1740s – 1960s	Numerous mills and mill sites, lower canal	City and private
Rappahannock Canal	1830s – 1960s	Navigation canal converted to raceway	City
Falmouth Ford	Washington-Rochambeau route	River crossing, camp sites in Old Mill Park	State and City
Elmhurst	1871	Brick dwelling with distinctive cupola	Private
Thornton-Forbes-Washington Cemetery	1749-1909	Family cemetery	Private
U.S. Route 1 corridor	1930-1950	Road side businesses	private

Land Use Potential

Planning Area 5 has a variety of neighborhoods as well as portions of both the U.S. Route 1 Bypass corridor and the Princess Anne Street corridor. The two corridors and two large areas noted in the following table have strong redevelopment potential.

Table 11-29. Land Use Potential in Planning Area 6.

Sub Planning Area	Acres	Current Zoning	Recommended Land Use
6A	13.5 acres	Commercial Highway	Planned Development – Mixed Use

6B	13 acres	Commercial-Transitional	Planned Development – Mixed Use
6C	0.6 miles of the U.S. Route 1 Bypass/Wallace/Amaret Street Corridor	Commercial-Highway, Commercial-Shopping Center, Commercial-Transitional/Office, Institutional, R-4 Residential	Planned Development – Mixed Use
6D	0.75 miles of the Princess Anne Street Corridor	Commercial-Highway, Commercial-Transitional/Office	Planned Development – Mixed Use

Sub Planning Area 6A – The area along the east side of Princess Anne Street, between Pelham and Herndon Streets, has been identified as the Mill District, within the Princess Anne Street Historic Entrance Corridor. On the west side of the street is the Canal Park, where the old industrial canal remains evident. The Mill District includes former industrial buildings, primarily from the nineteenth and early twentieth centuries. There are numerous opportunities for adaptive reuse as well as new construction, under a Planned Development – Mixed Use zoning.

Sub Planning Area 6B – There are three blocks along Fall Hill Avenue, bounded by Progress, Charles, and Hunter Streets, that were cleared of buildings and turned into parking lots. These lots served the old Mary Washington Hospital and other related medical buildings in the area. The Hospital has relocated and though some parking is still needed in the area, much of this acreage could be redeveloped.

Sub Planning Area 6C (U.S. Route 1/Wallace/Amaret Streets Corridor) – U.S. Route 1/Jefferson Davis Highway became functional when a new Falmouth Bridge was completed in the 1940s, providing a way for travelers to avoid driving through downtown Fredericksburg. Commercial development followed the new traffic pattern and over the years a great variety of uses gravitated to the area where the Bypass and Princess Anne Street intersected. A Planned Development-Mixed Use zoning district that extends to Wallace Street to the west and Amaret Street to the east, will provide for a more cohesive commercial corridor that also provides appropriate transitional land uses between the commercial activity along the roadway and the nearby residential neighborhoods.

Sub Planning Area 6D (Princess Anne Street Corridor) - This road was the original U.S. Route 1 for north south travel. When the U.S. Route 1 Bypass was built, Princess Anne Street became the business route. It extends from the Route 1 Bypass into the central business district and includes many roadside commercial uses, many of which have been adapted from earlier commercial uses. A Planned Development-Mixed Use zoning district will provide more suitable land uses as well as provide transitional uses between the commercial activity along the road and the nearby residential neighborhoods.

Infrastructure

Roads

No new roads are proposed in this planning area, but improvements are planned for Princess Anne Street, to consist of scaling down the built-up of asphalt, reestablishing proper drainage, and then resurfacing the roadway. Previous improvements have addressed sidewalks and reestablished on-street parking. In the very long term, the U.S. Route 1 Bypass (Jefferson Davis Highway) may need to be widened to a six-lane roadway, but no potential funding is available for this project to be included in the region's financially constrained long range plan.

Bridges

This planning area includes the Falmouth Bridge, which is one of five bridges that cross the Rappahannock River into Fredericksburg. This crossing is the U.S. Route 1 Bypass (Jefferson Davis Highway) that runs north-south, between Washington D.C. and Richmond. A replacement bridge with additional lane capacity is planned to be constructed between 2021 and 2025.

Another bridge allows the U.S. Route 1 Bypass to cross the Rappahannock Canal. This bridge is scheduled for replacement, without additional capacity, in 2019.

Trails

Existing bicycle/pedestrian trails include the Canal Trail and the Rappahannock River Heritage Trail. These two trails combined, comprise a loop that is just over five kilometers in circumference. A new bridge at Fall Hill Avenue and the Rappahannock Canal provides a safe bicycle/pedestrian route underneath that roadway. No additional trails are planned, but replacement of the U.S. Route 1 Bypass/Canal bridge will include enhanced accessible connections between the sidewalk along the U.S. Route 1 Bypass and the Canal Trail, which will enhance safe bicycle/pedestrian passage under the busy highway.

Traffic Calming

Although the U.S. Route 1 Bypass cuts through this planning area, the traditional street grid in the adjacent neighborhoods effectively diffuses traffic. As a consequence, no specific traffic calming measures are proposed. Fall Hill Avenue is being improved to a four-lane divided road, but these four lanes will not cross the Rappahannock Canal into Normandy Village. Instead, a four lane, divided connection will be made between the improved Fall Hill Avenue and Mary Washington Boulevard, on the south side of the Rappahannock Canal. The Fall Hill Avenue bridge over the Rappahannock Canal will remain a two lane road and the section of Fall Hill Avenue that runs through Normandy Village will also remain a two lane route.

Table 11-30. Transportation Summary for Planning Area 6.

Project	Location	Description
Princess Anne Street	U.S. Route 1 Bypass to Herndon Street	Address drainage and resurface road
Bridge replacement	U.S. Route 1 Bypass and Rappahannock Canal	Replace the bridge and improve cycling/pedestrian connections

Land Use Planning Area 7:

Downtown

Setting

Planning Area 7 (Map 11-8) includes the downtown business district and the many neighborhoods that surround it. This planning area encompasses the oldest part of the City and reflects the development pattern established by the street grid, laid out when Fredericksburg was founded. The area is characterized by the urban core - with its commercial, religious, and municipal functions - and by clearly defined residential neighborhoods.

Opportunities

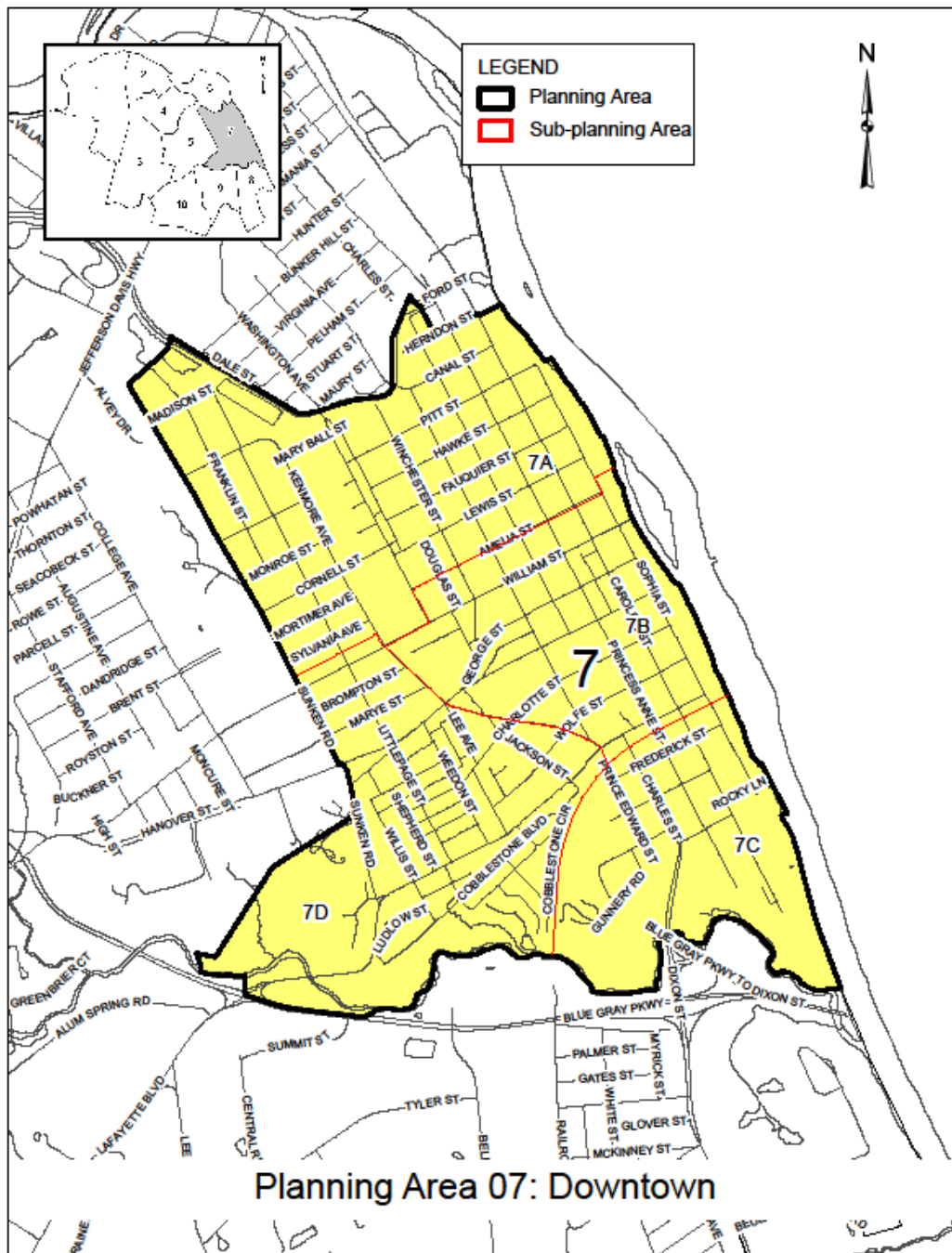
- Protect the historic aspects of the downtown business district, through careful adaptive reuse of existing buildings and appropriate new construction on infill sites.
- Support redevelopment that respects historic structures, but without dictating architectural style or limiting creativity.
- Evaluate parking needs and develop appropriate strategies (shared parking, structures, etc.) that provide for the continued viability of downtown Fredericksburg as well as its further growth and development.
- Continue to work with the Virginia Railway Express to provide additional parking for rail users, with direct access to VRE lots from the Blue and Gray Parkway.
- Work with VRE and FRED to establish the railway station area as a multi-modal center.
- Continue revitalization of the key corridors of Princess Anne Street, Kenmore Avenue, William Street, and Lafayette Boulevard.
- Improve the appearance of municipal parking lots and enhance the pedestrian connections between parking areas and downtown activity areas.
- Facilitate development of the East Coast Greenway across the Chatham Bridge and through downtown Fredericksburg.

- Improve public spaces in the historic center of the City, such as the Market Square and the riverfront park. Continue to revitalize the downtown tree canopy.
- Work with Main Street Fredericksburg to develop an appropriate mix of businesses that keep downtown a viable urban center.
- Promote residential and mixed-use development.
- When considering adaptive reuse of any public building, ensure that any new use will contribute to a dynamic downtown community.
- Ensure persons with disabilities are included in the downtown environment by evaluating the accessibility of buildings and infrastructure. Encourage downtown property owners to improve accessibility to shops, restaurants, offices, and other commercial facilities so everyone can visit all parts of the community.
- Evaluate the area between Lafayette Boulevard and Hazel Run, adjacent to the National Park, for possible preservation or appropriate redevelopment.
- Respect battlefield lines-of-sight.
- Protect established residential neighborhoods from existing and proposed commercial development, through transitional uses and design standards that minimize adverse impacts.

Existing Land Use

There are multiple uses already in place within the many close-knit blocks, so a review of existing land uses is more readily done by looking at this planning area in sub-areas.

Sub Planning Area 7A – This sub-area consists of the residential neighborhoods between the Rappahannock Canal and Amelia Street, and between the Rappahannock River and Sunken Road. Princess Anne Street extends into this area from the U.S. Route 1 Bypass (Jefferson Davis Highway) and was once the main north-south route through town before the U.S. Route 1 Bypass diverted through-traffic. As a consequence, it includes many roadside commercial uses, many of which have been adapted to other commercial uses.



Map 11-8. Planning Area 7.

The residential area between Kenmore Avenue and Sunken Road is a carefully designed neighborhood. Many of the blocks are bisected by alleys, within which the utility poles necessary for modern living are located. The neighborhood streets were thus left free of overhead wires, which allowed them to have an attractive tree canopy. Unfortunately, the physical design of these residential areas has become compromised by expanding the original four foot wide sidewalks to five feet and by allowing encroachments into some of the once-functional alleys. The too-wide sidewalks cut into the tree planting areas (in a neighborhood specifically designed for street trees) and the blocked alleys preclude their use for off-street parking. The City needs to reclaim its alleys and reestablish the four-foot-wide sidewalks.

Sub Planning Area 7B – This sub-area is Fredericksburg’s historic core and the Princess Anne Street corridor constitutes the City’s religious/government/financial corridor. These civic and ecclesiastical functions were established on this plateau in the early nineteenth century because it is well above flood levels. The City’s new court house maintains this historic context.

The topography in sub-area 7B is terraced. Sophia Street, closest to the Rappahannock River, has low areas where flooding occurs. Sophia Street is the link between the historic riverfront and central business district focused along Caroline Street. The west side of Sophia Street constitutes the urban edge, while the east side of the street, between Hanover and Wolfe Streets is being developed as a riverfront park.

The next street over, slightly higher in elevation, is Caroline Street, a place of businesses and residences. This corridor is defined by upscale homes to the north (sub planning area 7A) and to the south (sub planning area 7C), where the terrain is slightly higher in elevation than the commercial center. Buildings in the central business district are primarily brick, with visible roof planes. As most urban centers developed, visible roofs gave way to additional stories capped by a prominent cornice. In Fredericksburg, however, recovery from the Civil War was slow and while there are many new buildings with strong cornice features, many structures retain their visible roof planes.

Princess Anne Street is at a higher elevation still than Caroline Street. Safe from river flooding, prominent churches that define the City’s skyline are found there, as are the courts, city hall, and public safety buildings. Behind the religious/government/financial center are residential areas as well as the commercial corridor of William Street. The neighborhoods are characterized by a great variety of houses, but with a rough consistency in scale and massing. There are also pockets of very modest places, a reminder of the proximity of domestic help at one time for more affluent families. The William Street corridor has many opportunities for infill development at urban densities and scale.

A block to the south of William Street is George Street, a six-block route that connects the downtown business district with a former school, now called Maury Center. The Central Rappahannock Heritage Center is housed at Maury and the nearby playing field hosts school athletics as well as other community activities. A George Street walk has been established with brick sidewalks, a war memorial, and visitor wayside panels at points of interest.

Sub Planning Area 7C – This sub-area includes a neighborhood of large lots on a plateau well out of the flood hazard area adjacent to a more modest neighborhood that extends into the lower ground along Charles Street, where the drainage is to Hazel Run. This sub area is the terminus of Caroline and Princess Anne Streets, but Charles Street becomes Dixon Street as it heads south, beyond the City limits. Dixon Street was once known as the Richmond Stage Road and was an easy road through the relatively flat Tidewater region. Its character within this planning area is primarily residential, but also includes the old Walker-Grant School.

The Old Walker-Grant School was constructed as a segregated school for the City's African American population and includes two substantial buildings and large playing fields. It remains in use as a school and as administrative spaces. It is the oldest of all the City's schools and is slated for renovation and upgrade. The Downtown Greens provides a substantial

Sub Planning Area 7D – This sub-area is the battleground of the December 1862 and May 1863 battles of Fredericksburg. A portion of the Fredericksburg and Spotsylvania National Military Park constitutes its western end, including the Fredericksburg Visitor Center and the National Cemetery. The area between the Federal holdings and Kenmore Avenue has developed as a residential neighborhood. William Street runs along the north edge of this sub-area, extending into sub-area 7B. Kenmore Avenue branches off William Street, providing a link to Lafayette Boulevard. It follows what used to be a raceway and there are a variety of industrial buildings in this corridor, some of which have been adapted to commercial and residential uses.

Before construction of the U.S. Route 1 Bypass, Lafayette Boulevard was the north-south U.S. Route 1 highway. Like Princess Anne Street, it had a variety of roadside businesses, many of which have also been adapted to contemporary uses. The Federal government improved this road significantly between the downtown railway station and its National Cemetery, which is why it was once called Government Road. Lafayette Boulevard is also a prominent entryway into downtown Fredericksburg for motorists arriving from the south. Improvements to this route are planned south of the Blue and Gray Parkway, but the section of the road in Planning Area 7 will not be widened. This route has a variety of zoning districts, which need to be reconsidered for a more flexible Planned Development-Mixed Use zoning.

Environmental Factors

The Rappahannock River and Hazel Run constitute the eastern and southern boundaries of this planning area, respectively, and any development must address flood hazards as well as any environmentally sensitive areas. In addition, there is both natural and urban open space that is under permanent protection.

Table 11-31. Preservation Areas in Planning Area 7.

Name	Size	Description
Fredericksburg and Spotsylvania National Military Park	50 acres (approximately)	National Cemetery, Willis Cemetery, Fredericksburg Battlefield Visitor Center
Mary Washington Monument Park	4.0 acres	Memorial, stone lodge, and Gordon Cemetery
Washington Avenue mall	Four blocks	Open medians w/ monuments
Cobblestone/Hazel Run Nature Area	10 acres	Wetlands and woods, with trail
Fredericksburg Cemetery/ Confederate Cemetery	6.0 acres combined	Cemeteries
Shiloh Cemetery	2.0 acres	Cemetery
Riverfront Park	3.0 acres	New park to be developed
Memorial Park	5.25 acres	Recreational facilities
Community Gardens	9.4 acres	Garden plots, botanical garden, dog park
Downtown Greens	3.62 acres	Garden plots, gardens
Veterans Memorial	Traffic islands on George St.	Landscaped memorials
Maury Field/Potters Field	6.0 acres	Athletic fields and playground

Historic Resources

This planning area includes the Historic Fredericksburg District (HFD) and many other areas of historic importance. Development and redevelopment in designated areas must adhere to the City's historic district regulations. Best practice for designating historic districts is to include both sides of a street, which provides oversight of the entire streetscape. In Fredericksburg, several short overlay boundaries go down the middle of a street, but the long western boundary of the Historic District is comprised of the western boundary of the individual properties that front the west side of Prince Edward Street.

The National Park Service administers an area along Sunken Road that includes battlefield terrain and a National Cemetery. The City of Fredericksburg vacated its right of access to Sunken Road several years ago and the National Park Service has accomplished an extensive scene restoration effort that will continue as the Park acquires additional nearby properties along Willis Street and demolishes the houses there. The National Park Service interprets its holdings within the City limits primarily as the battlefield of December 13, 1862, but a second battle of Fredericksburg occurred across this same ground as part of the Chancellorsville campaign, in the spring of 1863. The City of Fredericksburg has begun to interpret the events of the second battle of Fredericksburg within its growing trail system, but significant portions of that 1863 battleground remain without interpretation on the Federally protected lands

Table 11-32. Historic Resources in Planning Area 7.

Site Name	Period of Significance	Description	Ownership
Historic Fredericksburg District	Historic continuum, 1728 to present	Downtown business district, neighborhoods, cemeteries	Various
Fredericksburg and Spotsylvania National Military Park	Civil War	National Cemetery, Sunken Road, battlefield terrain	Federal government
Fredericksburg Gun Factory (site)	American Revolution	Archaeological site	City
Washington Avenue Historic District	Late 19 th – early 20 th	Residential neighborhood with	Private, Non-Profit,

(1200-1500 blocks)	century	distinctive mall	City
Stearns House (720 William Street)	Early 20 th century	Dwelling converted to commercial use	Private
Maury School	Built 1919, expanded 1929 and 1936	Former school, now condominiums	Private
Mill Race Commons	Early 20 th century industrial bldg.	Factory converted to commercial and residential space	Private
Stratton House	Built 1855	Brick house on Littlepage Street, battlefield landmark	Private
Rowe House	Built 1850s	Brick house on Hanover Street, battlefield landmark	Private
Old Walker-Grant School	Built 1935, expanded	Racially segregated public school	City
Warehouse District	Late 19 th - early 20 th century warehouses	Collection of warehouses and industrial buildings	Private
Railroad Freight terminal	Built in 1920s	Freight building in use as condominiums	Private
Virginia Central Railway	Civil War, Reconstruction	Historic railway bed with trail	City

Land Use Potential

Fredericksburg long-term emphasis on maintaining the integrity of its historic district has resulted in a vibrant downtown that is economically viable and a desirable place to live, work, and visit. Because of its urban nature, this planning area has many redevelopment

opportunities and a variety of plans have been developed over the years, each building on strong urban concepts of pedestrian orientation, infill development, and mixed uses.

Downtown Adaptive Reuse Activity

There are several guiding principles for downtown redevelopment, as follows:

- Protect the character and historic integrity of downtown Fredericksburg.
- Enhance the downtown area as the region's urban hub, with center-city amenities that serve the greater regional community.
- Attract investors, residents, and visitors to the downtown area through attention to mixed-uses and flexible parking requirements.
- Replace the current variety of zoning districts along commercial and industrial corridors with a more suitable planned development-mixed use zoning.

Preservation of historic buildings has been a significant part of maintaining a viable downtown business district, through the careful adaptation of older buildings to contemporary needs. In addition, there are numerous vacant and underdeveloped lots that invite infill development. The City has developed a comprehensive review process for infill projects to encourage such development while maintaining the historic integrity of the downtown area.

Infrastructure

Roads

No new roads are proposed for this planning area, but there are two sets of one-way streets that should be considered for improvement. Amelia and William Streets constitute a primary automobile route for east-west travel, while Caroline and Princess Anne Streets accommodate north-south travel. These routes handle twenty first century automobile traffic within an eighteenth century community design. At one point, it was thought to be necessary to provide for high speed automobile traffic through downtown Fredericksburg, but best practices in planning suggest a rethinking of the need for higher speeds in a downtown environment. There are existing bypass highways for higher speed traffic and downtown locations can be made safer for pedestrians by returning the one-way streets to two-way traffic. The challenge, however, is that Fredericksburg's downtown alleys are insufficient (and sometimes nonexistent) as supporting infrastructure for the downtown economy. As a consequence, the one-way streets allow delivery vehicles to load and unload while blocking one lane of traffic. Downtown deliveries will need to be addressed before returning streets to their historic two-way traffic pattern. Potential solutions to this curbside management challenge include limiting deliveries to specific hours and/or establishing loading zones.

Bridges

This planning area includes two of the City's five bridges that cross the Rappahannock River. These crossings are as follows:

- Chatham Bridge – Business State Route 3 (William Street)
- Rappahannock River Bridge – CSX railway (two tracks)

The Chatham bridge is scheduled to be replaced between 2031 and 2035.

Trails

Every street in this planning area includes sidewalks for pedestrians. In addition, there are several sections of multi-use trails within the planning area. The longer trails coursing through the planning area are the Canal Park Trail and the Virginia Central Railway Trail.

The East Coast Greenway is the urban version of the Appalachian Trail, heavily focused on cyclists. Along its route from Maine to Miami, the Greenway will cross the Rappahannock River on the Chatham Bridge. Programmed repairs to the Chatham Bridge include the need to enhance the safety and functionality of this significant multi-use trail.

Traffic Calming

The traditional street grid effectively diffuses traffic and provides a general degree of traffic calming. As the riverfront park is developed, however, traffic along Sophia Street will need to be slowed down further, to enhance pedestrian safety in and around the new park. Raised intersections at Hanover and Charlotte Streets will accomplish this task, but other options should be evaluated as well.

As William Street and Amelia Street are improved, each intersection between Washington Avenue and Caroline Street should be modified to calm traffic and enhance pedestrian safety. This sidewalk adaptation will consist of the sidewalk being extended into the roadway, to bump out the curb at each corner. This physical addition to the sidewalks will enhance pedestrian access and safety, but will not remove any of the available on-street parking that already exists. Instead, the extended curbs will shorten the distance that pedestrians have to travel from curb to curb, create a traffic calming effect along these well traveled corridors, and frame (rather than reduce) the on-street parking.

Table 11-33. Transportation Summary for Planning Area 7.

Project	Location	Description
Chatham Bridge	William Street/Rappahannock River	Replace bridge to include improved bicycle/pedestrian facilities
Lafayette Boulevard Improvements	Blue and Gray Parkway to Sophia Street	Roundabout at Kenmore Ave., parking, intersection safety improvements
Sophia Street Traffic Calming	Hanover and Charlotte Streets	Raised intersections or other appropriate measure
Parking Deck for the Virginia Railway Express	Frederick Street (extended)	Structures parking near the VRE station, with direct access to the Blue and Gray Parkway
William and Amelia Street Traffic Calming	Between Washington Avenue and Caroline Street	Extended sidewalk areas at each intersection (bumpouts)
Reestablish two-way traffic patterns	Amelia/William Streets and Caroline/Princess Anne Streets	Eliminate pairs of one-way streets and reestablish two-way streets

Land Use Planning Area 8:

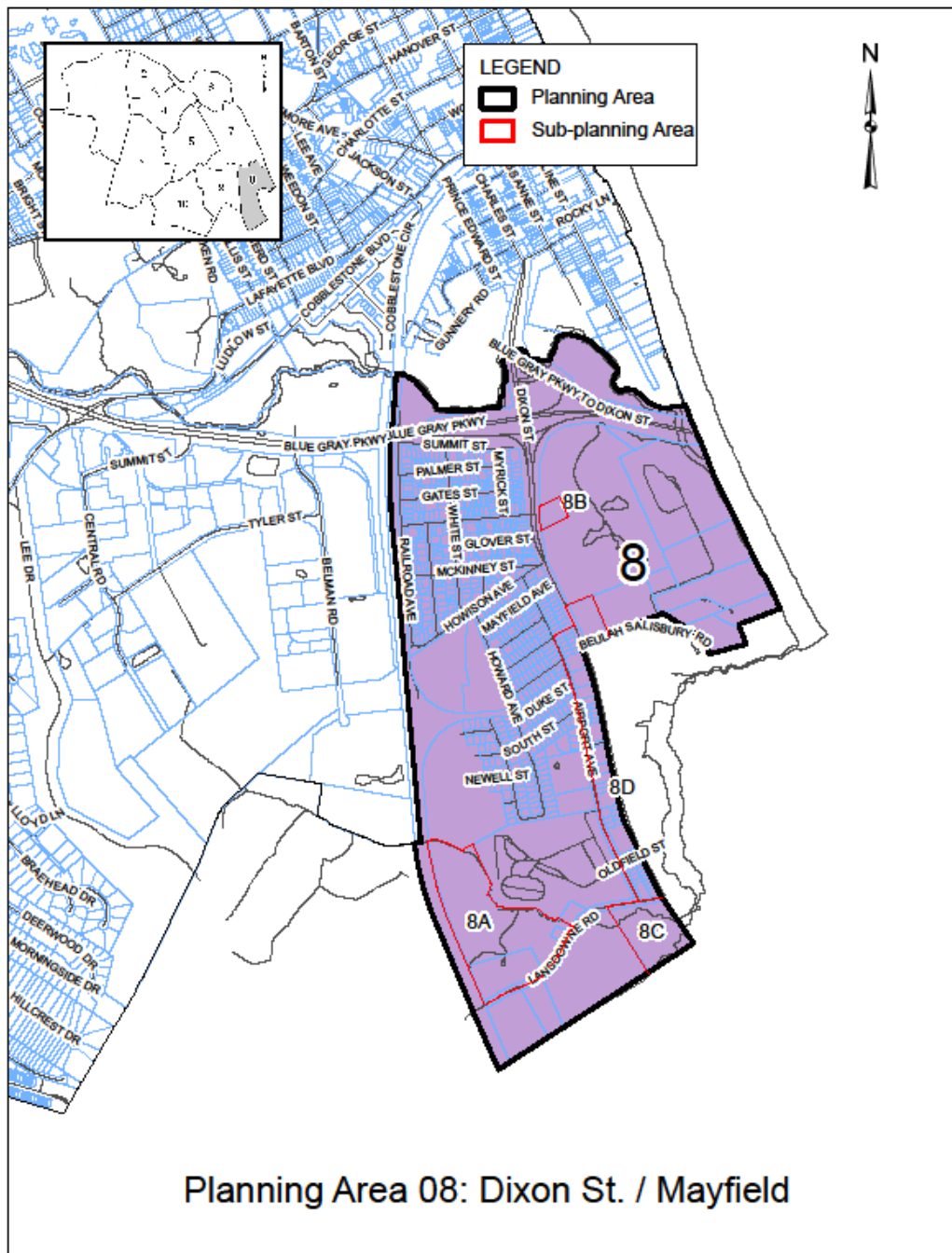
Dixon Street/Mayfield

Setting

Planning Area 8 (Map 11-9) is bounded by the railway to the west, Hazel Run to the north, the Rappahannock River to the east, and the City/County line to the south. This area includes residential neighborhoods, Dixon Park, and the fairgrounds. Road corridors include the Blue and Gray Parkway and Dixon Street (State Route 2/17).

Opportunities

- Construct a community center at Dixon Park.
- Expand Dixon Park toward the river, when the municipal wastewater treatment plant is decommissioned and removed. Consider a new boat ramp in that location.
- Continue to develop appropriate screening between the Mayfield neighborhood and the railway corridor.
- Continue to work with CSX to minimize hazardous materials kept near the Mayfield community.
- Enhance Dixon Street as an entryway to the City, through additional street trees and other suitable landscaping.
- Plant trees along neighborhood streets that will provide shade and plant trees along Railroad Avenue to continue to screen the neighborhood from rail activity.
- Protect established neighborhoods from existing and proposed commercial development, through transitional uses and design standards that minimize adverse impacts.



Map 11-9. Planning Area 8.

Existing Land Use

Planning Area 8 is characterized by several residential neighborhoods, the agricultural fairgrounds, and the recreational complex called Dixon Park. The municipal wastewater treatment plant is also in this planning area, adjacent to the river. The Dixon Street corridor, State Route 2/17, has a variety of commercial and industrial uses.

Table 11-34. Land Use Summary for Planning Area 8.

Corridor	Development Name	Type	Size
Dixon Street	Fredericksburg Agricultural Fair, Inc.	Non-profit fairgrounds	Approx. 30 acres
Dixon Street	Lincoln Terminal and other industries	Industrial	Various parcels
Dixon Street	Surgi-Center of Central Virginia	Medical	42,000 square feet
Dixon Street	Municipal treatment plant	Government	20 acres
Dixon Street	Dixon Park	Recreational	37 acres
Dixon Street	Mayfield	Residential	200+ single family homes
Dixon Street	Airport and New Kent Subdivisions	Residential	209 single family homes

Environmental Factors

Hazel Run constitutes the north boundary of this planning area and the stream valley merits special attention and protection. The southern portion of the planning area is traversed by a tributary to Deep Run and there are extensive areas of adjacent wetlands. The Rappahannock River constitutes a portion of this area's eastern boundary and is undeveloped except for the municipal wastewater treatment plant and remnants of the old FMC plant.

Table 11-35. Preservation Areas in Planning Area 8.

Name	Size	Description
City-owned riparian land	22 acres	Riverfront land at Hazel Run

Historic Resources

The northern portion of the planning area was a Civil War battleground, but the terrain has been much altered by the Blue and Gray Parkway and residential development. During the war years, a dwelling at what is now 1100 Dixon Street was a prominent landmark, known then as the Ferneyhough House. The existing frame building appears to have been built on the original foundation, but has deteriorated beyond economical repair.

Table 11-36. Historic Resources in Planning Area 8.

Site Name	Period of Significance	Description	Ownership
Ferneyhough House (Sligo) site (1100 Dixon Street)	Ante-bellum	Frame dwelling on historic foundation	Private
Powell-Toombs-Hicks- Parcell-Davis Cemetery	1895-1935	Cemetery at corner of Myrick and Summit Streets	Private

Land Use Potential

The Mayfield neighborhood has opportunities for infill development. Similarly, the Dixon Street corridor includes several sites with commercial infill potential. The Agricultural Fairgrounds property is also zoned for industrial uses.

The City is exploring the feasibility of developing a joint wastewater treatment plant in partnership with Spotsylvania County. If this effort results in the abandonment of the existing municipal treatment plant, an expansion of Dixon Park to the Rappahannock River becomes

possible. This expansion could provide the potential location for a new State boat ramp and other recreational improvements.

Table 11-37. Land Use Potential in Planning Area 8.

Sub Planning Area	Acres	Current Zoning	Recommended Land Use
8A	27.5	I-1 Industrial	I-1 and I-2 Industrial
8B	1.5	R-2 Residential	Incorporate into Dixon Park
8C	7	I-1 Industrial	I-1 Industrial
8D	3,300 linear feet in Dixon Street Corridor	Commercial-Highway, Commercial-Transitional/Office	Commercial-General; Commercial-Transitional/Office

Sub Planning Area 8A – This 27.5-acre tract includes frontage on Lansdowne Road. The site includes wetlands and is a challenge to develop. The recommended land use is industrial, with due attention to the wetlands.

Sub Planning Area 8B – This small parcel is surrounded by Dixon Park and has a deteriorating house with a driveway to Dixon Street. The site was a battlefield landmark, but the existing house appears to be a post Civil War dwelling, constructed on an older foundation. The proposed use has been Commercial, but access to the house is awkward from the busy Dixon Street. A better use is as part of Dixon Park, which would allow the Dixon Street driveway to be closed and the property accessed from Dixon Park.

Sub Planning Area 8C – This 7-acre parcel is at the corner of Dixon Street and Lansdowne Road. It is cut by stream channels, which has made it difficult to develop. Recommended land use is industrial.

Sub Planning Area 8D (Dixon Street Corridor) – This section of Dixon Street is a two lane road within Spotsylvania County that is entirely inadequate for the existing traffic. Within the City limits, this road is a four-lane divided road to the Blue and Gray Parkway. The section in Spotsylvania County is planned for improvements to a four-lane roadway, but not until the year

2036. The west side of the road is within the City limits, but only a narrow strip has commercial zoning.

Infrastructure

Roads

This planning area is well served by Dixon Street as well as the Blue and Gray Parkway. There are no needed improvements to these roadways within the City limits, but as the four-lane Dixon Street extends into Spotsylvania County it drops to a two-lane roadway, which is inadequate for existing traffic when the fairgrounds are in use. Plans are in place to improve an additional four miles of Dixon Street/State Route 2/17 in Spotsylvania County to a four-lane roadway, but funding is not anticipated to be available until 2036-2040. An alternative route is already in use along Lee Drive through the Fredericksburg and Spotsylvania National Military Park. The National Park Service is increasingly concerned about adverse impacts of so much cut-through traffic to park visitors and is considering making Lee Drive a one-way road, to ensure visitor safety. Since this park road was never meant to function as part of the area's road network, improvements to State Route 2/17 need more immediate attention and funding.

An additional issue with State Route 2/17 concerns access to and from the Airport Subdivision. There is a short link called George Coghill Road that connects the subdivision to Route 2/17, which would benefit from a deceleration lane on the main road.

Trails

Pedestrian access between downtown and Mayfield/Dixon Park is in place along excellent sidewalks lining both sides of Dixon Street. A riverside trail between lower Caroline Street and Dixon Park is contained in the Fredericksburg Pathways Plan (2006), but this route encounters a host of natural obstacles that will be very costly to overcome. Since the pedestrian connection is well established, with a safe crossing over Hazel Run, the riverside route does not have a high priority for implementation. More trees should be planted along the sidewalks, to make them more inviting to pedestrians.

Traffic Calming

Because of the congestion issues on Dixon Street (Route 2/17), Airport Avenue experiences a high degree of cut-through traffic. Traffic calming measures are needed to ensure resident safety. The pedestrian crossing at Dixon and McKinney Street should also be monitored to ensure it maintains a high degree of safety.

Land Use Planning Area 9:

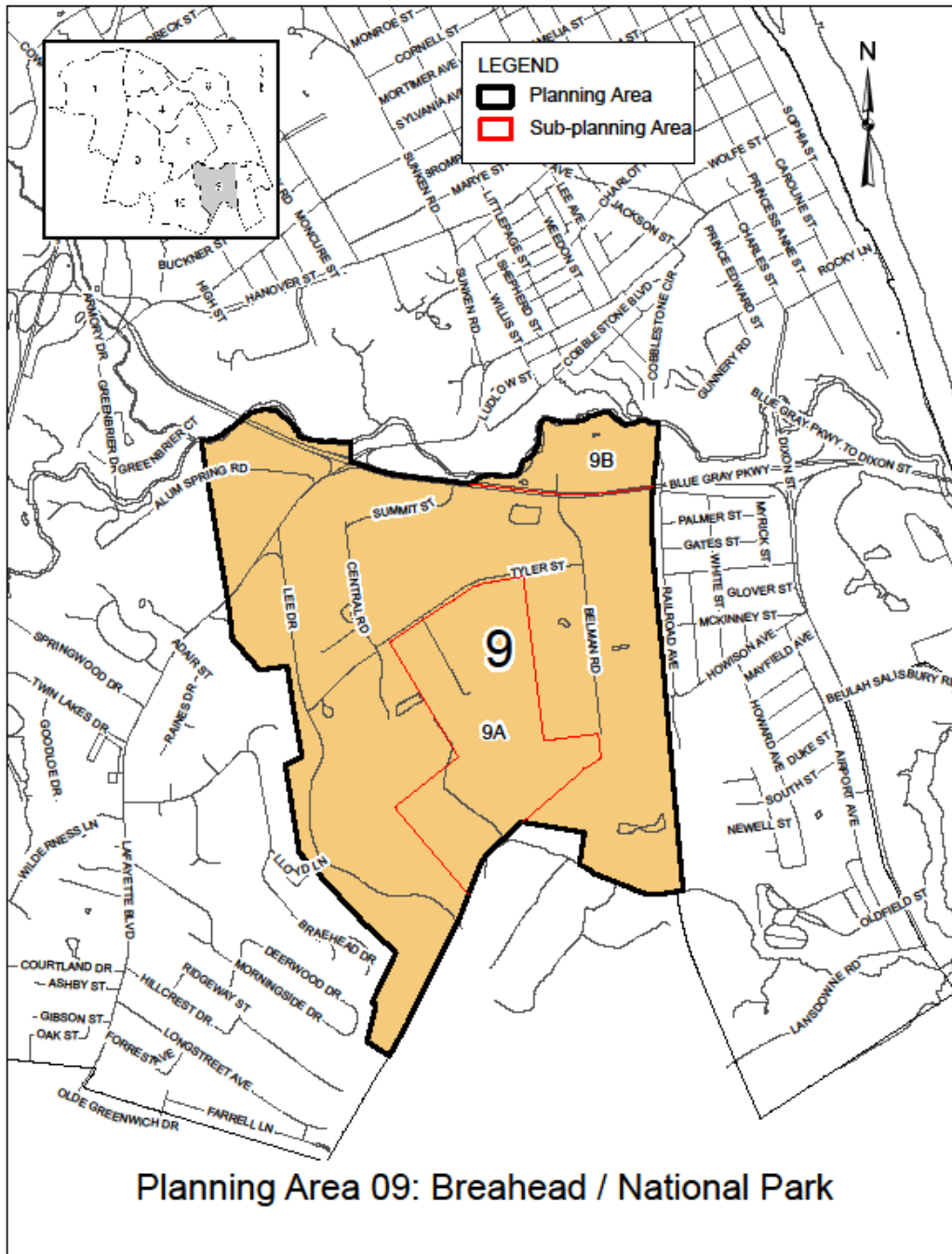
Braehead/National Park

Setting

Planning Area 9 (Map 11-10) includes the City's industrial park as well a large portion of the Fredericksburg battlefield administered by the Fredericksburg and Spotsylvania National Military Park. The industrial park is flat, with extensive wetlands. The National Park property consists of a low ridge that drains to the east. The Blue and Gray Parkway defines the north edge of this planning area and the CSX Railway runs along its eastern edge.

Opportunities

- Provide for appropriate commercial development along the Blue and Gray Parkway.
- Continue to develop the City/Battlefield Industrial Park.
- Explore potential land use alternatives for the industrial park, but recognize that the existing road network within the industrial park would require extensive redesign and that any new development would also have potential visual impacts on the adjacent National Park.
- Respect the battlefield lines of sight.
- Work with the National Park Service to provide a safe pedestrian crossing across Lafayette Boulevard at Lee Drive.



Map 11-10. Planning Area 9.

Existing Land Use

The City's heavy industrial uses are located in the City/Battlefield Industrial Park, but a significant part of that area (84 acres) is still in agricultural use.

Table 11-38. Land Use Summary for Planning Area 9.

Corridor	Development Name	Type	Size
Blue & Gray Pkwy.	City/Battlefield Industrial Park	Industrial	Various
Blue & Gray Pkwy.	Braehead Farm	Agricultural	84 acres

Environmental Factors

There are areas of wetlands within the City/Battlefield Industrial Park that must continue to be protected. Hazel Run must also be protected when drainage is addressed in the industrial park. This planning area also includes components of the Fredericksburg and Spotsylvania National Military Park.

Table 11-39. Preservation Areas in Planning Area 9.

Name	Size	Description
Fredericksburg and Spotsylvania NMP	64.5 acres	Battlefield terrain
Braehead	18 acres, with house	Battlefield terrain and a house under preservation easement

Historic Resources

Planning Area 9 includes a portion of the Fredericksburg and Spotsylvania National Military Park that is accessed by a Park road called Lee Drive. Within the Park boundary is the Braehead

mansion, which is privately owned but protected through a preservation easement held by the Virginia Department of Historic Resources. Most of Planning Area 9, including the land within the National Park, was also a battleground on May 3, 1863, during the second battle of Fredericksburg. The National Park Service, however, does not interpret this second battle.

Table 11-40. Historic Resources in Planning Area 9.

Site Name	Period of Significance	Description	Ownership
Old grain road	Civil War	Ante-bellum road	City
Fredericksburg and Spotsylvania NMP	Civil War	Wooded terrain, earthworks	Federal
Braehead	Civil War	1850s dwelling	Private

Land Use Potential

The City/Battlefield Industrial Park presents excellent development and redevelopment opportunities. Several sites are large enough for major industrial uses. The City seeks development within the industrial park that properly protects the integrity of the neighboring National Park.

Table 11-41. Land Use Potential in Planning Area 9.

Sub Planning Area	Acres	Current Zoning	Recommended Land Use
9A	84	I-2 General Industrial	Industrial
9B	19	I-2 General Industrial	Planned Development-Mixed Use

Sub Planning Area 9A – This 84-acre tract is the remaining portion of the Braehead Farm that remains in agricultural use. The proposed use is industrial and access will be off Tyler Street. There are no plans to extend Belman Road into Spotsylvania County.

Sub Planning Area 9B – This 19-acre parcel has frontage on the Blue and Gray Parkway, at its intersection with Belman Road. Under a Planned Development – Mixed Use zoning, this area could have the potential to attract professional offices that seek to locate near an urban center, but need more acreage than might be available downtown.

Infrastructure

Roads

The road network of the City/Battlefield Industrial Park has two points of entry, at the Blue and Gray Parkway along its northern boundary. Further access is blocked by the railway corridor to the east and by the National Park to the west. There have been discussions about opening a connection to the south, to Lansdowne Road in Spotsylvania County. This route has never been included in any roadway plans, neither regional nor local, as it would compromise the function of the Blue and Gray Parkway. The appropriate route for north-south travel is State Route 2/17, rather than through the industrial park.

The other north-south road in this planning area is Lafayette Boulevard, to be widened to a four lane divided road, with bicycle/pedestrian facilities. This road touches the Fredericksburg and Spotsylvania National Military Park at Lee Drive, but all rights of way will be accommodated without impacting the National Park.

Within the National Park, Lee Drive provides access for park visitors, but because of the inadequacy of roads like State Route 2/17 in Spotsylvania County, Lee Drive gets used by local commuters, which creates a safety hazard for park visitors. The Park Service has full authority to make Lee Drive a one-way route, which would properly address safety concerns. Such a step, though, would impact State Route 2/17 and accelerate attention to widening that two lane road to a four lane road in Spotsylvania County, to meet the four lane divided road that already exists within the City limits.

Trails

The existing and planned trails in Planning Area 10 are located on the west side of Lafayette Boulevard although the East Coast Greenway has been proposed to connect to Spotsylvania County by way of Lee Drive, within the Fredericksburg and Spotsylvania National Military Park. The National Park Service's tour route along Lee Drive is already heavily used by cyclists and pedestrians and the Park Service staff is concerned about ensuring the safety of the growing number of cyclists and pedestrians, within the context of this roadway continuing to absorb an increasing volume of local cut-through traffic.

As noted above, the long-term traffic solution to cut-through traffic on Lee Drive is an improved State Route 2/17 that more readily serves local traffic needs. Within the National Park, a one-way traffic pattern on Lee Drive would enhance pedestrian/cyclist safety, especially if the East Coast Greenway is allowed to extend along that route. The City staff and the National Park staff have determined that a pedestrian crossing south of a proposed traffic roundabout on Lafayette Boulevard would provide for maximum safety, for bringing cyclists and pedestrians across Lafayette Boulevard.

Where trails cross roadways at-grade, the long term plan is to provide for bridges that will separate the vehicle route from the pedestrian/cycling route. A bridge is needed and planned for the at-grade crossing of the VCR Trail at the Blue and Gray Parkway. Another bridge would potentially be desirable where the City trail network will connect to the National Park, across Lafayette Boulevard, but a facility of that magnitude will entail full discussion with the National Park Service.

Traffic Calming

A traffic circle will be built along Lafayette Boulevard, at Lee Drive. This facility will accommodate the development west of Lafayette Boulevard and also provide access to Lee Drive, within the Fredericksburg and Spotsylvania National Military Park.

Table 11-42. Transportation Summary for Planning Area 9.

Project	Location	Description
Lafayette Boulevard	Blue and Gray Parkway to the south city limit	Widen to a 4-lane divided road, with bicycle/pedestrian facilities
Roundabout/traffic calming	Lafayette Blvd. at Lee Drive	Establish roundabout
VCR Trail bridge	Lafayette Boulevard and the Blue and Gray Parkway	Construct a bicycle/pedestrian bridge over the highway

Land Use Planning Area 10:

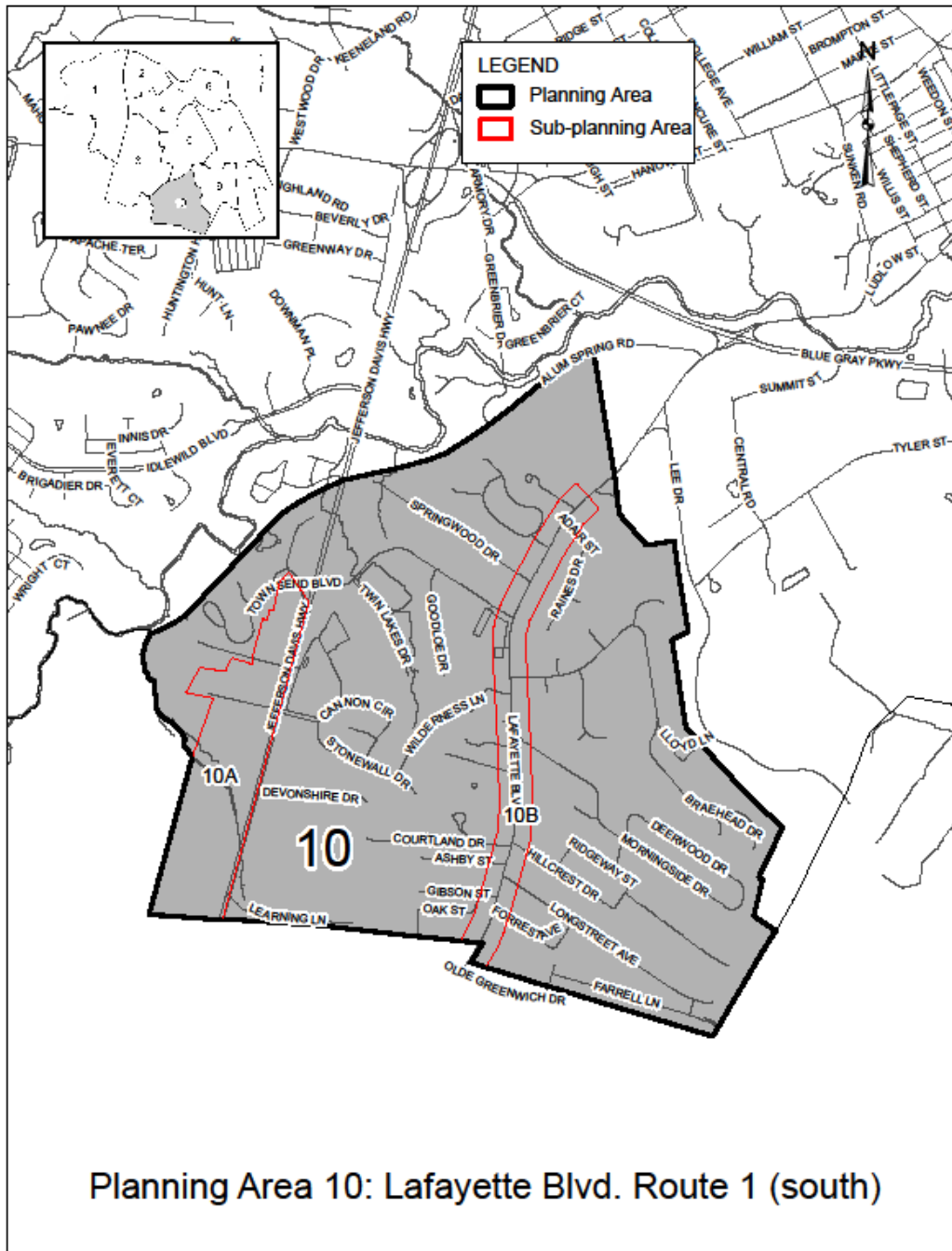
Lafayette Boulevard/Route 1 (south)

Setting

Planning Area 10 (Map 11-11) consists primarily of the neighborhoods off Lafayette Boulevard. Commercial activity is found along the U.S. Route 1 Bypass (Jefferson Davis Highway) and on Lafayette Boulevard.

Opportunities

- Improve Lafayette Boulevard to be a four lane divided roadway, with bicycle/pedestrian facilities, as specified in adopted transportation plans.
- Redevelop Lafayette Boulevard as envisioned in the Lafayette Boulevard Corridor Plan.
- Provide bicycle/pedestrian connections between residential areas and the City's developing trails network.
- Plant more trees along Lafayette Boulevard and along residential streets.
- Protect existing residential neighborhoods from existing and proposed commercial development, through transitional uses and design standards that minimize adverse impacts.



Map 11-11. Planning Area 10.

Existing Land Use

This planning area includes two public schools, scattered commercial uses on the U.S. Route 1 Bypass (Jefferson Davis Highway) and a variety of uses along Lafayette Boulevard.

Table 11-43. Land Use Summary for Planning Area 10.

Corridor	Development Name	Type	Size
U.S. Route 1 Bypass	Various	Commercial	Individual parcels
U.S. Route 1 Bypass	Lafayette School and Walker-Grant School	Governmental	43 acres
U.S. Route 1 Bypass	Townsend Center	Commercial	23,600 square feet
U.S. Route 1 Bypass	Townsend Apts.	Residential	200 units
U.S. Route 1 Bypass	Cedar Ridge Apts.	Residential	130 units
U.S. Route 1 Bypass	Wellington Lakes	Residential	160 apartments
U.S. Route 1 Bypass	Confederate Ridge	Residential	75 houses
U.S. Route 1 Bypass	Fox Run	Residential	17 houses
Lafayette Boulevard	Various	Commercial	Individual parcels
Lafayette Boulevard	Kensington Hills	Residential	47 houses
Lafayette Boulevard	Brown's Subdivision	Residential	19 houses
Lafayette Boulevard	Arcade Court	Residential	6 houses
Lafayette Boulevard	Braehead Woods	Residential	103 houses
Lafayette Boulevard	Morningside	Residential	96 houses
Lafayette Boulevard	Hillcrest	Residential	82 houses
Lafayette Boulevard	Jackson Park	Residential	91 houses
Lafayette Boulevard	Alum Springs	Residential	20 houses

Lafayette Boulevard	Twin Lakes	Residential	39 houses
Lafayette Boulevard	Wellington Woods	Residential	114 apartments
Lafayette Boulevard	Cedar Lane Terrace	Residential	12 townhomes
Lafayette Boulevard	Dillard	Residential	82 houses
Lafayette Boulevard	Courtland Heights	Residential	58 houses
Lafayette Boulevard	Olde Greenwich	Residential	130 townhomes

Environmental Factors

This planning area is a plateau upon which roads and subdivisions have been built. Attention should be directed to Hazel Run and other streams that receive runoff. The larger Hazel Run watershed has experienced severe erosion, due to inadequate stormwater management over several decades, and the challenge of restoring its integrity will include new regulations as well as retrofits to existing stormwater facilities.

Historic Resources

This planning area is high ground that had military advantages during the Civil War. Though the terrain is historically significant, there are no historic structures in this part of the City.

Land Use Potential

This planning area is characterized by numerous distinctive neighborhoods, many of which have infill opportunities. Infill sites are also available along Lafayette Boulevard and the U.S. Route 1 Bypass.

Table 11-44. Land Use Potential in Planning Area 10.

Sub Planning Area	Size	Current Zoning	Recommended Land Use
10A	3,600 feet of the U.S. Route 1 Bypass	Commercial-Highway	Planned Development – Mixed Use

10B	5,300 feet of Lafayette Boulevard	Various - residential and commercial	Planned Development – Mixed Use
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Sub Planning Area 10A (U.S. Route 1 Bypass Corridor) – The Commonwealth constructed the U.S. Route 1 Bypass (Jefferson Davis Highway) in the 1940s, providing a way for travelers to quickly drive past communities where they did not intend to stop. Commercial development followed the new traffic pattern and over the years a great variety of uses gravitated to the new roadway. A Planned Development-Mixed Use zoning district will provide for a more cohesive commercial corridor.

Sub Planning Area 10B (Lafayette Boulevard Corridor) - Before construction of the U.S. Route 1 Bypass, Lafayette Boulevard was the north-south U.S. Route 1 through Fredericksburg. In this capacity, there developed a variety of roadside businesses, many of which have been adapted to contemporary uses. Lafayette Boulevard is also a prominent entryway into downtown Fredericksburg for motorists arriving from the south. Improvements to this route are planned south of the Blue and Gray Parkway, to include four travel lanes, with a center divider, and a sidewalk on the east side of the road and multi-use path on the west side. Right-of-way acquisition will claim many properties with direct access to the road, but the various neighborhoods will be kept intact. This route has a variety of zoning districts, which need to be reconsidered for a more flexible Planned Development-Mixed Use zoning.

Infrastructure

Roads

Lafayette Boulevard is identified in local and regional long range transportation plans to be widened to a four lane divided road, with bicycle/pedestrian facilities. This improvement project includes not only the route as it exists in the City, but would extend into Spotsylvania County, to Four Mile Fork.

Trails

The Virginia Central Railway Trail extends into downtown Fredericksburg and is also readily accessible from Springwood Drive. With the exception of Twin Lakes, most of the neighborhoods in this planning area do not have sidewalks, so cyclists must be cautious. The bicycle/pedestrian facilities that will be part of the Lafayette Boulevard widening project will be accessible from all of the neighborhoods in this planning area, but again without sidewalk

connections on the neighborhood collector roads. Springwood Drive provides a connection to the VCR Trail and an on-road bicycle route should be marked.

There is an at-grade crossing where the VCR Trail crosses the U.S. Route 1 Bypass. This crossing will eventually be bridged, to enhance bicycle/pedestrian safety.

Traffic Calming

Twin Lakes Drive has four excellent traffic calming features that are exceptionally effective in providing for pedestrian safety. Similar features could be constructed in the Confederate Ridge neighborhood, if traffic becomes a problem there.

The Lafayette Boulevard widening project will have several traffic circles, which help to keep traffic moving, while also discouraging speeding. There is no need for traffic calming features on the other neighborhood streets as these typically have only a single connection to Lafayette Boulevard.

Table 11-45. Transportation Summary for Planning Area 10.

Project	Location	Description
Lafayette Boulevard	Blue and Gray Parkway to the south city limits	Widen to a 4-lane divided road, with bicycle/pedestrian facilities
VCR Trail bridge	U.S. Route 1 Bypass	Construct a bicycle/pedestrian bridge over the highway
Install markings for an on-road bicycle route	Springwood Drive	Install markings between Lafayette Boulevard and the VCR Trail

Appendix A:

Best Practices for a Livable Community

A Livable Built Environment

Fredericksburg's buildings, streets, and utilities shape the quality of life for the entire population. As a consequence, they should function at the highest possible level. The built environment, however, is complex. Where traditional planning has typically treated components of the built environment separately, such as land use and transportation, current practice recognizes the interrelation of these various components and seeks to provide a stronger framework for addressing their respective challenges as an integrated whole.

There are ten best practices for achieving a livable built environment.

1. **Plan for a multi-modal transportation network.** A multi-modal transportation system allows people to use a variety of ways to travel within and outside their community. A multi-modal system reduces dependence on any single mode of travel such as automobiles, which increases the mobility of the larger community including those who cannot drive (children, the elderly, persons with disabilities, and the indigent). Less driving and more walking will also reduce air pollution, with associated health benefits.
2. **Plan for transit-oriented development.** Transit oriented development is characterized by higher-density mixed use development around transit stations and along transit lines such that the location and design of the development encourages transit use and pedestrian activity. Transit thus reduces automobile use and decreases the need for parking.
3. **Coordinate transportation with land uses.** Provide for transportation efficiencies and economic development by ensuring that jobs can be accessed by all persons, whether or not they drive a vehicle.
4. **Provide complete streets.** City streets need to safely provide access for motorists, pedestrians, cyclists, and public transit within the same right-of-way. All modes of travel need not be equally prioritized on any given street, but streets that serve the multiple functions of travel, social interaction, and commercial activity result in more vibrant (and livable) neighborhoods.

5. **Plan for mixed land use patterns that enhance walking/cycling.** Placing residential uses in close proximity to non-residential uses (schools, jobs, shopping, etc.) increases walking/cycling and decreases automobile trips. Mixed land use patterns should incorporate safe, accessible, and attractive design features that promote social interaction.
6. **Plan for infill development.** Undeveloped or underused parcels of land in otherwise built-up areas are already served by existing infrastructure and their development/redevelopment should be encouraged and supported to add to the urban dynamic.
7. **Encourage design standards consistent with the community context.** The existing function and aesthetic appeal of neighborhoods, corridors, and special districts should be reinforced by subsequent development/redevelopment. New building placement, massing, materials, and various design elements should be compatible with the existing context and reinforce the community's character.
8. **Ensure public facilities, commercial places, and activity centers are accessible.** All facilities and spaces open to the public should be designed to be safe, served by different transportation modes, and be accessible to all citizens regardless of mobility impairment.
9. **Preserve and reuse historic resources.** Historic resources embody and illustrate the cultural heritage of a community. Buildings, sites, landmarks, and districts that are considered to have historic and cultural value should be respected and kept in active use.
10. **Encourage green building design and energy conservation.** Green buildings embody resource and energy efficiencies and should be aggressively pursued. Energy conservation in general reduces energy costs, improves environmental quality, and community health.

A Respect for Nature

Human beings depend on a healthy natural environment for nourishing food, breathable air, drinkable water, energy, and more. Development and human activity, however, can disturb nature's balance and damage the resources it provides. While some natural resources are protected through separate functional plans and regulations, an overall coordination can be achieved through comprehensive planning.

There are ten best practices that maintain a community's respect for nature.

1. **Protect, connect, and restore natural habitats and sensitive lands.** Natural habitats include wetlands, riparian corridors, woodlands, and undeveloped open space. These areas also include a variety of sensitive lands such as steep slopes, geographically unstable areas, and places easily disturbed by human activity. Keeping natural areas connected conserves natural ecosystem functions, promotes water quality, and even helps to sustain clean air. Restoring degraded areas helps to reestablish natural diversity and associated ecosystem functions.
2. **Provide and protect green infrastructure.** Green infrastructure is a managed network of parks, greenways, and protected lands that are interconnected to provide a wide range of critical ecological functions such as wildlife habitat and stormwater management. Green infrastructure can also provide recreational opportunities.
3. **Encourage development that respects natural topography.** Hillsides, ridges, steep slopes, and lowlands can pose a challenge to development. Taking these features into account during the development process can reduce costs and minimize subsequent natural hazard risks (flooding, landslides, etc.).
4. **Enact policies that reduce carbon footprints.** A carbon footprint is a term used to measure the environmental impact of a person, organization, or a city, both through the direct consumption of fossil fuels as well as the indirect emissions associated with the manufacture and transport of all goods and services consumed. Reduction of a carbon footprint is usually associated with energy conservation and related policies are meant to improve air quality and health as well as provide economic benefits.
5. **Seek to improve air quality.** Air quality standards are established by the federal government and typically enforced by state and local governments. Limiting air pollutants can occur through effective transportation planning (mobile sources) and through construction regulation (point sources).
6. **Encourage adaptations to climate change.** Climate change is causing sea levels to rise, stronger extreme weather events, and long term shifts in precipitation levels. Communities seeking to reduce their vulnerability to extreme weather impacts will need to develop adaptation strategies that minimize adverse effects on their environment, economy, and public health.

7. **Encourage renewable energy use.** Renewable energy sources include the sun, wind, thermal energy, and hydropower, which are naturally regenerated and do not diminish. Use of renewable energy reduces the adverse impacts of fossil fuels.
8. **Reduce solid waste.** Solid waste is the garbage and refuse that results from human activity. Many solid waste items can be diverted from the waste stream and be recycled into new products or composted.
9. **Conserve water and ensure a lasting water supply.** The City's water comes entirely from surface water sources. This supply is not infinite though, and water conservation planning is going to become critical to meeting the community's long term needs.
10. **Protect streams, watersheds, and floodplains.** The natural function of streams and floodplains are often altered by construction of buildings and culverts. Natural resource management should occur on a watershed scale, to effectively protect water supplies, maintain water quality, and provide for drainage and stormwater management.

A Resilient Economy

A local economy is comprised of businesses, trades, production facilities, and related activities, but also depends on outside inputs and trends. Consequently, the local employment base is affected not only by local business activity, but by the decisions of distant firms or governments. Resilience, however, relies on effective management of local assets.

There are seven best practices related to maintaining a resilient economy.

1. **Provide the physical capacity for economic growth.** Communities need to ensure that sufficient land is available for commercial and industrial development. Current and projected economic conditions will guide this effort to support existing as well future production of goods and services.
2. **Ensure a balanced mix of land uses.** Both residential and non-residential land uses are necessary components of fiscal sustainability. Providing public services to residents, business owners, and visitors need to be closely matched to the taxes and user fees generated by those uses.
3. **Ensure transportation access to employment centers.** Places with high job density need to be accessible by multiple modes of transportation, so persons without personal vehicles can find and maintain employment.

4. **Promote green businesses and jobs.** Business and commercial activities that contribute to preserving and restoring environmental quality are said to be “green.” Green businesses may be associated with processes where the wastes of one industry are the raw materials for another industry.
5. **Encourage community-based development and revitalization.** Community-based economic development promotes businesses that serve local needs and are compatible with the vision and values of the community. Local resources that enhance local economic opportunities will revitalize commercial areas, neighborhoods, and other place-based community resources.
6. **Provide and maintain infrastructure capacity.** Structures and networks must be adequately sized to meet existing and future development. In this context, infrastructure planning includes not only new facilities, but consideration of how the changing nature of existing facilities might require realignment or other modification.
7. **Develop plans for post-disaster economic recovery.** Natural or man-made disasters will interrupt economic activity and damage local resources such as houses and businesses. Recovery from storms, flooding, fires, and other incidents will be considerably enhanced by officially adopted policies and implementation tools that are put in place before such disasters occur.

Interwoven Equity

Equity involves the fair distribution of benefits and costs. A basic fairness test is to determine whether a decision will serve the needs of the full range of the local population – rich and poor, young and old, native and immigrant. Poor, underserved, and minority populations often do not participate in debates over community decisions, but their needs must still be recognized. As an example, housing assistance programs are absolutely critical to a substantial part of the City’s population, which is evident not because of their participation in the public process, but through careful research and analysis.

There are nine best practices that support the concept of interwoven equity:

1. **Ensure a range of housing types.** Residential units of different size, configuration, and price are needed for households of different size and income level to be able to live and/or work within their own community.
2. **Ensure a balance between jobs and housing.** There is no one formula for a jobs/housing ratio, as each jurisdiction has different characteristics and needs. Jobs and

housing matched to the labor force will result in lower vehicle-miles travelled, but transportation investments that serve commuters and help them to maintain a high quality of life are also desirable. Fredericksburg's residential tax base is 56 percent of the City's total tax base, while the commercial tax base is at 41 percent. This ratio shows the City's economy to be a strong one, but other successful jurisdictions will have entirely different ratios and also have strong economies.

3. **Provide for physical, environmental, and economic improvements in disadvantaged neighborhoods.** Neighborhoods can suffer from disinvestment and physical deterioration as a result of aging buildings and relocation of economic opportunities. Focused intervention is often needed to prevent decline and to revitalize the nearby economy.
4. **Plan for improved health and safety for at-risk populations.** At-risk populations include children, the elderly, persons with disabilities, those living in institutionalized settings, those with limited English proficiency, and the transportation disadvantaged. These populations may have additional needs during and after natural or man-made disasters, periods of extreme weather, and periods of economic downturn.
5. **Ensure accessible public services and facilities.** Services available for the benefit of the community and places such as libraries, parks, and community centers should be located so all members of the community have safe and convenient transportation options to reach them.
6. **Upgrade substandard infrastructure.** Older parts of the City that have been developed and occupied for a long period of time will need their water, sewer, roads, and sidewalks brought up to newer standards from time to time. Improving such infrastructure provides a foundation for continued economic growth and improves the City's quality of life.
7. **Plan for workforce diversity and development.** Workforce development focuses on helping people find the skills necessary to obtain employment. Areas that promote a diverse and skilled workforce are attractive to employers and enable residents to find employment within their community.
8. **Protect vulnerable populations from natural hazards.** When disasters threaten lives and property, vulnerable neighborhoods that face higher risks may require special intervention to get through such events.

9. **Promote environmental justice.** All citizens deserve the same degree of protection from environmental and health hazards and should also have equal access to the decision making process.

A Healthy Community

Health is a state of physical, mental, and social well-being rather than merely the absence of disease or infirmity. In a healthy community, residents are assured that the air and water are safe, that open space and recreation opportunities are convenient to use, that local food outlets are located near neighborhoods, public schools and health care are provided equitably, and active public safety programs are in place.

There are seven best practices to support a healthy community:

1. **Reduce exposure to toxins and pollutants in the natural and built environment.** Toxins are poisonous substances that can harm living organisms. Pollutants are waste substances that can contaminate air, water, and soil and cause adverse changes in the environment. Pollution can also take the form of energy, such as noise, light, and heat. Reducing exposure to toxins and pollutants improves the health of individuals and the community.
2. **Increase public safety through reduction of crime and injuries.** Public safety involves protection from crimes and disasters. Police, fire, and emergency services will address public safety issues as they arise, but crime prevention can also be achieved through environmental design that removes opportunities for crime in parks and other public spaces and on public facilities such as trails.
3. **Mitigate and redevelop brownfields.** Environmental contamination can complicate development and redevelopment of abandoned or underused properties. Cleaning up and reusing brownfield sites returns them to productive use.
4. **Provide facilities for physical activity and healthy lifestyles.** Sidewalks, walking/cycling trails, and accessible and equitably distributed recreational opportunities support physical activity and healthy lifestyles.
5. **Provide accessible parks, trails, and open space near all neighborhoods.** The proximity of parks and open space to neighborhoods supports both increased physical activity among residents as well as provides opportunities for relaxation. Further, trails and greenways link neighborhoods with other neighborhoods, commercial areas, and services, providing alternatives to driving.

6. **Provide for access to healthy foods for all neighborhoods.** Healthy foods include those that are fresh or minimally processed, naturally dense in nutrients, and low in fat, sodium, and cholesterol. There is no standard definition of locally grown food. Sources can range from backyards and community gardens to farms within the region.
7. **Ensure equitable access to health care, public safety facilities, schools, and cultural facilities.** Equitable access is meant to ensure that services and facilities are reachable by all persons, regardless of social or economic background.

Regionalism

Regional planning commissions in Virginia function without regulatory authority, but still provide a perspective that extends beyond local jurisdictional boundaries. A major exception are the federally-mandated metropolitan planning organizations, which are required to develop regional transportation plans as a condition for receiving federal transportation funds. From the local government perspective, the plans and policies of adjacent jurisdictions have reciprocal impacts, and the regional commission helps to address issues with regional implications such as open space and environmental protection, economic development, hazard mitigation, and so on.

There are five basic best practices to support responsible regionalism:

1. **Coordinate local land use planning with regional transportation investments.** Available and proposed infrastructure is the basis of virtually all land use decisions. Coordinating land use planning with transportation investments is a responsible integration of disciplines.
2. **Coordinate local open space plans with regional green infrastructure plans.** The regional green infrastructure plan shows the desired future locations for parks, greenways, and protected lands within a multi-jurisdictional context. Coordinating local open space plans with the regional green infrastructure plan can maximize both ecological and public benefits as well as leverage investment in parks, greenways, and trails.
3. **Encourage development patterns that can sustain transit.** The existing infrastructure (Interstate-95) and proximity to Northern Virginia/Washington D.C. will result in continued population growth within the George Washington Planning District. Low density development patterns are causing severe stress on the transportation network

and the projected growth must address increased densities to allow transit to function efficiently within the severe constraints of anticipated transportation revenues.

4. **Continue to promote regional cooperation and inter-jurisdictional agreements for services and infrastructure.** Regional cooperation has allowed local jurisdictions to maximize limited resources by sharing costs for such facilities as water treatment plants, jails, and landfills. Finding other opportunities for regional cooperation can improve efficiencies and result in cost savings in local government operations.
5. **Encourage consistency between local capital improvements and regional infrastructure priorities.** Coordinating jurisdictional capital projects with adopted regional infrastructure goals ensure that critical resources are expended as efficiently as possible.

APPENDIX B:

The Action Plan

Actions and Priorities